

DOCUMENT RESUME

ED 072 114

TM 002 356

AUTHOR Harris, Margaret I.; Harris, Chester W.
TITLE Newly Constructed Reference Tests for Cognitive Abilities. Report from the Project on A Structure of Concept Attainment Abilities.
INSTITUTION Wisconsin Univ., Madison. Research and Development Center for Cognitive Learning.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
BUREAU NO BR-5-0216
PUB DATE Nov 71
CONTRACT OEC-5-10-154
NOTE 144p.; Working Paper No. 80

EDRS PRICE MF-\$0.65 HC-\$6.58
DESCRIPTORS Answer Keys; *Cognitive Tests; Criterion Referenced Tests; *Grade 4; *Grade 5; *Test Construction; *Tests; Timed Tests

ABSTRACT

One of the major steps in the project entitled "A Structure of Concept Attainment Abilities" is to identify reference tests for cognitive abilities. A part of this task involved the construction of some of these types of tests for use with fourth and fifth grade students. This paper presents 35 tests that were constructed or adapted for inclusion in a battery of reference tests for cognitive abilities appropriate for the fourth and fifth grade level. (Author)

FILMED FROM BEST AVAILABLE COPY

NEWLY CONSTRUCTED REFERENCE TESTS FOR COGNITIVE ABILITIES

ED 0721114

WISCONSIN RESEARCH AND DEVELOPMENT

**CENTER FOR
COGNITIVE LEARNING**

SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned
this document for processing to

In our judgment, this document
is also of interest to the clearing
houses noted to the right. Index-
ing should reflect their special
points of view.



Working Paper No. 80

NEWLY CONSTRUCTED REFERENCE TESTS FOR COGNITIVE ABILITIES

By Margaret L. Harris and Chester W. Harris

Report from the Project on
A Structure of Concept Attainment Abilities

Principal Investigators: Robert E. Davidson, Lester S. Golub,
Herbert J. Klausmeier, Thomas A. Romberg, B. Robert Tabachnick,
and Alan M. Voelker. Technical Development Program Director:
Mary R. Quilling. Research Associate: Dorothy A. Frayer

Wisconsin Research and Development
Center for Cognitive Learning
The University of Wisconsin
Madison, Wisconsin

November, 1971

© 1971 - The Regents of the University of Wisconsin for the Wisconsin Research and Development Center for Cognitive Learning. Copyright is claimed only during the period of development, test, and evaluation, unless authorization is received from the U.S. Office of Education to claim copyright on the final materials. For the current copyright status contact either the copyright proprietor or the U.S. Office of Education

The research reported herein was performed, in part, pursuant to a contract with the United States Office of Education, Department of Health, Education, and Welfare, under the provisions of the Cooperative Research Program. The opinions expressed in this publication do not necessarily reflect the position or policy of the Office of Education and no official endorsement by the Office of Education should be inferred.

Center No. C-03/Contract OE 5-10-154

NATIONAL EVALUATION COMMITTEE

Samuel Brownell
Professor of Urban Education
Graduate School
Yale University

Henry Chauncey
President
Educational Testing Service

Elizabeth Koontz
Waste and Labor Standards
Administration, U.S.
Department of Labor,
Washington

Patrick Suppes
Professor
Department of Mathematics
Stanford University

Launce F. Carter
Senior Vice President on
Technology and Development
System Development Corporation

Martin Deutsch
Director, Institute for
Developmental Studies
New York Medical College

Roderick McPhee
President
Punahou School, Honolulu

***Benton J. Underwood**
Professor
Department of Psychology
Northwestern University

Francis S. Chase
Professor
Department of Education
University of Chicago

Jack Edling
Director, Teaching Research
Division
Oregon State System of Higher
Education

G. Wesley Sowards
Director, Elementary Education
Florida State University

RESEARCH AND DEVELOPMENT CENTER POLICY REVIEW BOARD

Leonard Berkowitz
Chairman
Department of Psychology

Russell J. Hosler
Professor, Curriculum
and Instruction

Stephen C. Kleene
Dean, College of
Letters and Science

B. Robert Tabachnick
Chairman, Department
of Curriculum and
Instruction

Archie A. Buchmiller
District State Superintendent
Department of Public Instruction

Clauston Jenkins
Assistant Director
Coordinating Committee for
Higher Education

Donald J. McCarty
Dean
School of Education

Henry C. Weinlick
Executive Secretary
Wisconsin Education Association

Robert E. Grinder
Chairman
Department of Educational
Psychology

Herbert J. Klausmeier
Director, R & D Center
Professor of Educational
Psychology

Ira Sharkansky
Associate Professor of Political
Science

M. Crawford Young
Associate Dean
The Graduate School

EXECUTIVE COMMITTEE

Edgar F. Borgatta
Pratt Institute Professor of
Sociology

Robert E. Davidson
Assistant Professor
Educational Psychology

Russell J. Hosler
Professor of Curriculum and
Instruction and of Business

Wayne Otto
Professor of Curriculum and
Instruction (Reading)

Anne E. Buchanan
Project Specialist
R & D Center

Frank H. Farley
Associate Professor
Educational Psychology

***Herbert J. Klausmeier**
Director, R & D Center
Professor of Educational
Psychology

Robert G. Petzold
Associate Dean of the School
of Education
Professor of Curriculum and
Instruction and of Music

Robin S. Chapman
Research Associate
R & D Center

FACULTY OF PRINCIPAL INVESTIGATORS

Vernon L. Allen
Professor of Psychology

Frank H. Farley
Associate Professor of Educational
Psychology

James Moser
Assistant Professor of Mathematics
Education, Visiting Scholar

Richard L. Venezky
Assistant Professor of English
and of Computer Sciences

Ted Czajkowski
Assistant Professor of Curriculum
and Instruction

Lester S. Golub
Lecturer in Curriculum and
Instruction and in English

Wayne Otto
Professor of Curriculum and
Instruction (Reading)

Alan Voelker
Assistant Professor of Curriculum
and Instruction

Robert E. Davidson
Assistant Professor of
Educational Psychology

John G. Harvey
Associate Professor of
Mathematics and of Curriculum
and Instruction

Milton O. Pella
Professor of Curriculum and
Instruction (Science)

Larry Wilder
Assistant Professor of Curriculum
and Instruction

Gary A. Davis
Associate Professor of
Educational Psychology

Herbert J. Klausmeier
Director, R & D Center
Professor of Educational
Psychology

Thomas A. Romberg
Associate Director, R & D Center
Professor of Mathematics and of
Curriculum and Instruction

Peter Wolff
Assistant Professor of Educational
Psychology

M. Vere DeVault
Professor of Curriculum and
Instruction (Mathematics)

Donald Lange
Assistant Professor of Curriculum
and Instruction

B. Robert Tabachnick
Chairman, Department
of Curriculum and
Instruction

MANAGEMENT COUNCIL

Herbert J. Klausmeier
Director, R & D Center
V A C Henman Professor of
Educational Psychology

Thomas A. Romberg
Associate Director

James Walter
Director
Dissemination Program

Dan G. Woolpert
Director
Operations and Business

Mary R. Quilling
Director
Technical Development Program

* COMMITTEE CHAIRMAN

STATEMENT OF FOCUS

The Wisconsin Research and Development Center for Cognitive Learning focuses on contributing to a better understanding of cognitive learning by children and youth and to the improvement of related educational practices. The strategy for research and development is comprehensive. It includes basic research to generate new knowledge about the conditions and processes of learning and about the processes of instruction, and the subsequent development of research-based instructional materials, many of which are designed for use by teachers and others for use by students. These materials are tested and refined in school settings. Throughout these operations behavioral scientists, curriculum experts, academic scholars, and school people interact, insuring that the results of Center activities are based soundly on knowledge of subject matter and cognitive learning and that they are applied to the improvement of educational practice.

This Working Paper is from the Project on the Structure of Concept Attainment Abilities in Program 1. The general objectives of this project are to identify basic concepts in language arts, mathematics, science, and social studies appropriate at a given grade level; to develop tests to measure achievement of these concepts; and to develop and identify reference tests for cognitive abilities. These will be used to study the relationships among learned concepts in various subject matter areas, cognitive abilities, and possibly, certain cognitive styles. The results of these will be a formulation of a model of structure of abilities in concept attainment.

ACKNOWLEDGEMENTS

We take great pleasure in expressing our gratitude to two persons who generated most of the items used in most of the tests included in this paper. They are Pamela Robinson Aschbacher and Barbara G. Sterrett who were Project Specialists at the Center at the time.

CONTENTS

	Page
Acknowledgements	iv
List of Tables	vii
Abstract	ix
Introduction	xi
Reference Tests for Cognitive Abilities	
Best Word Class	1
Circle Reasoning	4
Class Name Selection	8
Concealed Words	13
Disemvowelled Words	16
Gestalt Completion	18
Letter Classification	23
Letter Grouping	25
Letter Triangle	28
Number Class Extension	33
Number Classification	36
Number Exclusion	39
Number Relations	42
Number Series	45
Omelet Test	49
Picture Class Memory	51
Picture Classification	56
Picture Exclusion	62
Picture Group Name Selection	67
Picture Group Naming	72
Remembering Classes: Members	77
Remembering Classes: Names	82
Same-Opposite	86
Scrambled Sentences	88
Seeing Trends	91
Sensitivity to Order	94
Sentence Order	97
Verbal Analogies	102
Verbal Classification	106
Verbal Exclusion	109
Word Exclusion	112
Word Group Naming	115
Word Groups	119
Word Linkage	122
Word Relations	125
References	131
Appendix A: Keys for Machine Scorable Tests	135
Appendix B: Keys for Hand Scored Tests	137

LIST OF TABLES

Table	Page
1 Number of Items and Administration Times for Each Test . .	xiv

ABSTRACT

One of the major steps in the project entitled "A Structure of Concept Attainment Abilities" is to identify reference tests for cognitive abilities. A part of this task involved the construction of some of these types of tests for use with fourth and fifth grade students. This paper presents 35 tests that were constructed or adapted for inclusion in a battery of reference tests for cognitive abilities appropriate for the fourth and fifth grade level.

INTRODUCTION

The major steps in the project entitled "A Structure of Concept Attainment Abilities" were taken to be:

1. To identify basic concepts in language arts, mathematics, science, and social studies appropriate at the fourth grade level
2. To develop tests to measure achievement of these concepts
3. To identify reference tests for cognitive abilities
4. To study the relationships among learned concepts in the four subject matter areas and the identified cognitive abilities
5. To formulate a model or structure of abilities in concept attainment

This paper presents the tests that were constructed or adapted for inclusion in a battery of reference tests for cognitive abilities; this task is a part of step three. Thirty-five tests were adapted or constructed for use with fourth and fifth grade students.

The nature of these tests was determined by an analysis of three different schemata or systems of cognitive abilities; a description of these systems and their role in the project is given in a separate paper to be published in the near future: "Three Systems of Classifying Cognitive Abilities as Bases for Reference Tests".

Briefly, the three systems identified are the Primary Mental Abilities schema of the Thurstones (1938, 1941); the facet design

for achievement, consisting of three tasks and three types of content, proposed by Cattman (1970); and the Guilford (1967) analysis of cognition using four contents and six products. (Note that cognition is only one of five operations of the complete Guilford Structure of Intellect.) In making use of the Guilford analysis, four products--units, classes, relations, and systems--appeared to be most relevant and most easily defined in an unambiguous fashion. The Cattman schema includes three task types, two of which are rule-inferring and rule-applying; these were of major interest as guides to test development for cognitive abilities. The third task, achievement or rule-applying when the rule used is formally taught in school, appeared to characterize the subject matter tests of concept attainment and thus did not play a major role in the development of the tests described in this paper. The Thorstones' Primary Mental Abilities are available in commercial tests appropriate for the fourth and fifth grade student.

A list, alphabetical by title employed for the test, of the constructed tests is given in Table 1. In many instances the title is similar to or identical with a title used by Guilford for a similar test. The number of items for each test is given and the administration times are the range of actual time, in minutes, that was required for eight groups of girls and eight groups of boys who had just completed the fifth grade to take the test, the median time required for the boys, and the median time required for the girls. The body of this paper presents the text, including directions, of

each test constructed for this portion of step three of the project.

Answer keys for each test are presented in the Appendix.

The tests as presented in this paper are the result of initial item writing, critique, tryout on an appropriate sample of students, and revision based on item analysis results. A Technical Report entitled "Item Analyses and Reliabilities for Reference Tests for Cognitive Abilities: Fifth Grade Boys and Girls" will be published in the near future to report the procedures used on test development and statistical characteristics of the items and the tests.

TABLE 1

Number of Items and Administration Time for Each Test

Test Name	Number of Items	Administration Time in Minutes		
		Range	Median- Boys	Median- Girls
Best Word Class	20	5-10	7	6.5
Circle Reasoning	20	9-19	14.5	14.5
Class Name Selection	20	5-10	8	7.5
Concealed Words	20	9-16	12	12
Disemvowelled Words	32	11-18	15.5	15
Gestalt Completion	20	9-15	11.5	12
Letter Classification	20	6-13	11.5	8.5
Letter Grouping	20	9-16	14.5	12
Letter Triangle	20	6-15	13	10.5
Number Class Extension	20	9-18	16	12
Number Classification	30	10-17	15	13.5
Number Exclusion	20	8-15	13	11
Number Relations	20	9-20	17	12.5
Number Series	20	10-13	12	12
Omelet Test	20	15-26	20	20
Picture Class Memory	20	4- 8	5	5
Picture Classification	20	6-14	10	8.5
Picture Exclusion	20	6-13	7.5	9
Picture Group Name Selection	20	6-12	9.5	7.5
Picture Group Naming	20	7-15	10.5	8.5
Remembering Classes: Members	20	5-10	7.5	6.5
Remembering Classes: Names	20	4- 8	6	5
Same-Opposite	20	4- 8	6	5
Scrambled Sentences	20	10-16	15	13.5
Seeing Trends	20	8-20	15.5	14
Sensitivity to Order	20	6-11	8.5	8
Sentence Order	40	10-15	15	12
Verbal Analogies	24	7-13	12	9
Verbal Classification	20	7-12	8	10
Verbal Exclusion	20	6- 9	7	7
Word Exclusion	20	7-13	11	10
Word Group Naming	20	9-12	12	12
Word Groups	20	8-15	12	10
Word Linkage	20	7-12	9.5	7.5
Word Relations	20	7-16	13	10

REFERENCE TESTS FOR COGNITIVE ABILITIES

BEST WORD CLASS

DIRECTIONS

We often think of things as belonging to a class or being a kind of something. For example, we think of a chair as being a kind of furniture. In the questions that follow you will see a word in capitals on the left that can be called a kind of something. There are four possible answers listed on the right. Pick the best answer and mark its box on your answer sheet.

Here is an example:

1. OAK is a kind of

A. food

B. bird

C. car

D. tree

1. ☐ A ☒ B ☐ C ☐ D

Which word is the best answer? OAK is a kind of tree. OAK is not a kind of food, bird or car. The D-box has been marked correctly above.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

BEST WORD CLASS

1. RLED is a kind of
 - A. grass
 - B. book
 - C. bamboo
 - D. song
2. CORNUSK is a kind of
 - A. plant
 - B. covering
 - C. grain
 - D. vegetable
3. ORGAN is a kind of
 - A. neart
 - B. muscle
 - C. musician
 - D. body part
4. RING is a kind of
 - A. bell
 - B. song
 - C. sound
 - D. gold
5. TORNADO is a kind of
 - A. wind
 - B. flood
 - C. rain
 - D. automobile
6. PELL is a kind of
 - A. pod
 - B. sound
 - C. vegetable
 - D. fruit
7. BUCK is a kind of
 - A. male
 - B. antler
 - C. doe
 - D. meat
8. NEPREW is a kind of
 - A. youngster
 - B. relative
 - C. baby
 - D. female
9. CROCODILE is a kind of
 - A. fish
 - B. snake
 - C. reptile
 - D. insect
10. SPIRE is a kind of
 - A. tunnel
 - B. castle
 - C. steeple
 - D. dungeon

GO ON TO THE NEXT PAGE

- | | |
|-----------------------------|---------------------------|
| 11. ADOBE is a kind of | 16. LIMERICK is a kind of |
| A. stucco | A. verse |
| B. clay | B. cheese |
| C. stone | C. lizard |
| D. rock | D. wagon |
| 12. LIGHT is a kind of | 17. OGRE is a kind of |
| A. weight | A. genie |
| B. energy | B. phantom |
| C. lamp | C. vegetable |
| D. fire | D. monster |
| 13. SHALLOW is a kind of | 18. NYLON is a kind of |
| A. depth | A. fiberglass |
| B. height | B. natural material |
| C. width | C. man-made material |
| D. weight | D. cotton fiber |
| 14. RECESS is a kind of | 19. DREAM is a kind of |
| A. report | A. sleep |
| B. vacation | B. fairyland |
| C. possession | C. nightmare |
| D. reservoir | D. image |
| 15. COMPLIMENT is a kind of | 20. FOOD is a kind of |
| A. praise | A. fat |
| B. spice | B. flavor |
| C. service | C. starch |
| D. wish | D. fuel |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

CIRCLE REASONING

DIRECTIONS

In each question there are 5 rows of circles and dashes. In each of the first 4 rows one circle is dark. These dark circles show you the "rule" for deciding which circle should be dark in the last row. You are to figure out the rule that fits the first 4 rows. Then use the rule to decide which circle should be dark in the last row. On your test booklet, put an X on the circle that should be dark.

Look at some examples below.

EXAMPLE I.	- ● - 0 0 - 0	(Row 1)
	● 0 - 0 0 0 0	(Row 2)
	- - - ● 0 0 -	(Row 3)
	- ● - 0 0 - 0	(Row 4)
	- - 0 0 0 0 -	Which circle should be dark?
	1 2 3 4 5 6 7	

Look carefully at the first example. Find out which circle is the dark one in every row. In each row the dark circle is always the very first circle on the left. This is called the "rule." Following this rule, which circle in the bottom row should be the dark one?

That's right. You should darken the first circle on the left. Then the last row would look like this:

-	-	●	0	0	0	-
1	2	3	4	5	6	7

The number for this dark circle is 3, --so 3 is the number of the correct answer. Here is a sample row of answer boxes that is marked correctly for this example. The 3-box has been filled in.

I. **1**

Now turn the page and look at a second example.

Directions (continued):

EXAMPLE II. ● - - - 0 0 0
 - ● - 0 0 0 -
 0 0 0 0 0 - ●
 - 0 0 - ● - -
 0 0 - 0 - 0 0
 1 2 3 4 5 6 7

Look carefully. Can you find out which circle is the dark one in each row? This may look hard at first. The dark circle is not always the first circle in every row like the last problem. It also isn't always the last circle in the row, is it? If you look closely you will see that the dark circles are separated from all the other circles by dashes. In every row the dark circle is the only circle that is "alone." Following this rule, which circle in the bottom row should be dark? That's right. It is the circle above the number 4. The last row would look like this:

0 0 - ~~●~~ - 0 0
 1 2 3 4 5 6 7

The answer box for example II has been marked correctly here:

II. **I**

EACH QUESTION IS DIFFERENT! You will have to look at each one carefully because there are many different kinds of rules. There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

CIRCLE REASONING

Remember, only a circle can be the correct answer. A dash can never be.

1. 0 ● - - - 0 -
 0 - ● - 0 - -
 - - 0 - - ● 0
 - - - 0 ● 0 -
 0 0 - - - 0 -
 1 2 3 4 5 6 7

6. 0 - ● 0 - - -
 ● 0 - - 0 0 0
 - - - ● 0 - 0
 - ● 0 - 0 0 0
 0 - 0 - - 0 0
 1 2 3 4 5 6 7

2. 0 ● 0 - - 0 0
 - 0 - 0 ● 0 -
 0 - 0 ● 0 - 0
 0 0 - - 0 ● 0
 - 0 0 0 - - 0
 1 2 3 4 5 6 7

7. 0 0 0 - 0 0 ●
 0 0 0 0 0 ● 0
 - 0 0 0 0 0 ●
 0 0 0 0 - 0 ●
 0 0 0 0 0 0 -
 1 2 3 4 5 6 7

3. 0 0 0 ● - 0 0
 0 0 - 0 ● 0 0
 0 - 0 - 0 - ●
 0 0 - - - 0 ●
 0 0 - 0 0 - 0
 1 2 3 4 5 6 7

8. 0 - 0 ● - - 0
 0 0 0 - 0 ● -
 - 0 - 0 ● - 0
 0 0 0 0 - 0 ●
 - 0 0 - 0 - 0
 1 2 3 4 5 6 7

4. ● - 0 0 0 - -
 0 0 - ● - - -
 0 0 0 - - ● -
 - - ● - - 0 0
 0 0 - - 0 - -
 1 2 3 4 5 6 7

9. - ● 0 0 0 0 0
 0 0 - ● 0 0 -
 - ● - - 0 0 0
 0 0 0 0 0 - ●
 0 0 0 - 0 0 0
 1 2 3 4 5 6 7

5. 0 ● - 0 0 0 -
 - 0 0 ● 0 - -
 0 0 0 ● 0 - 0
 - 0 0 0 0 - ●
 0 0 0 - 0 0 0
 1 2 3 4 5 6 7

10. 0 0 0 - 0 0 ●
 0 - 0 0 ● 0 0
 0 0 - 0 0 ● -
 0 - 0 0 ● - 0
 0 0 - 0 0 0 -
 1 2 3 4 5 6 7

GO ON TO THE NEXT PAGE

CIRCLE REASONING

Remember, only a circle can be the correct answer. A dash can never be.

11. - 0 - 0 ● 0 -
 0 ● 0 - - 0 0
 - 0 ● 0 - - -
 - 0 0 - 0 ● 0
 - 0 - 0 0 0 -
 1 2 3 4 5 6 7

16. 0 0 - - ● 0 0
 0 - - ● - 0 0
 0 0 0 0 - - ●
 - - ● - 0 - 0
 0 0 - - 0 - -
 1 2 3 4 5 6 7

12. 0 0 ● 0 0 - 0
 - 0 0 ● 0 - -
 0 0 ● - 0 0 0
 - - 0 - 0 ● 0
 - - - 0 0 0 0
 1 2 3 4 5 6 7

17. 0 - 0 0 - 0 ●
 0 - - 0 ● 0 0
 0 0 0 - - 0 ●
 0 - 0 - 0 ● 0
 0 0 - 0 - 0 0
 1 2 3 4 5 6 7

13. ● 0 - - 0 0 0
 - - ● 0 - - 0
 0 - 0 - ● 0 -
 0 - ● 0 - - 0
 0 0 0 - 0 0 -
 1 2 3 4 5 6 7

18. 0 0 - 0 - 0 ●
 0 0 0 - 0 ● 0
 0 0 0 0 ● 0 0
 0 0 - - 0 0 ●
 0 - 0 0 0 - 0
 1 2 3 4 5 6 7

14. ● 0 0 - 0 0 0
 - 0 ● 0 0 - -
 0 0 ● 0 - - 0
 - 0 0 - 0 ● 0
 0 0 0 0 0 - -
 1 2 3 4 5 6 7

19. 0 0 0 - 0 ● -
 0 ● - - - 0 -
 0 - 0 ● - - 0
 0 ● - 0 0 0 0
 0 - - 0 0 - 0
 1 2 3 4 5 6 7

15. - 0 0 - ● 0 0
 - 0 - ● 0 0 0
 0 0 0 0 - - ●
 0 0 0 - 0 - ●
 0 0 - 0 0 - 0
 1 2 3 4 5 6 7

20. 0 - - 0 ● - 0
 0 0 0 ● 0 0 0
 0 0 - 0 0 ● -
 0 0 0 - 0 0 ●
 0 0 0 0 0 0 0
 1 2 3 4 5 6 7

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

CLASS NAME SELECTION

DIRECTIONS

For each question there are four words on the left which are alike in some way. There are three possible answers on the right. One of them is a general name for the group of words on the left. Pick the best name for the group and mark its letter in the correct box on the answer sheet.

Here is an example question:

- | | | |
|-----------|---------|------------------|
| I. poodle | | A. cats |
| terrier | | B. dogs |
| hound | are all | C. brown animals |
| collie | | |

I. B

Poodle, terrier, hound and collie are all dogs. The best answer is "B". The B-box has been marked correctly above. They could all be brown animals but the best answer is dogs.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

CLASS NAME SELECTION

- | | | |
|---|---------|---|
| 1. touch
smell
taste
hearing | are all | A. ways of feeling
B. senses of the body
C. parts of the body |
| 2. water
electricity
steam
atomic energy | are all | A. power sources
B. liquids
C. gases |
| 3. needle
antler
tack
fork | are all | A. pointed objects
B. metal things
C. tools |
| 4. oil
food
gas
coal | are all | A. liquids
B. fuels
C. petroleum products |
| 5. mink
beaver
raccoon
fox | are all | A. cave-dwelling animals
B. rare animals
C. fur-bearing animals |
| 6. helmet
gas mask
shield
space suit | are all | A. head coverings
B. clothing
C. protectors |

GO ON TO THE NEXT PAGE

CLASS NAME SELECTION

- | | | | |
|-----|---|---------|---|
| 7. | button
zipper
bolt
clothespin | are all | A. fasteners
B. decorations
C. parts of clothing |
| 8. | gold
aluminum
iron
silver | are all | A. jewelry
B. metals
C. money |
| 9. | sundial
clock
hourglass
wristwatch | are all | A. time pieces
B. decorations
C. furniture |
| 10. | minute
year
century
hour | are all | A. groups of days
B. dates
C. periods of time |
| 11. | warehouse
brain
library
cabinet | are all | A. buildings
B. storage places
C. communication devices |
| 12. | den
nest
hive
cave | are all | A. rooms
B. furniture
C. homes |

GO ON TO THE NEXT PAGE

CLASS NAME SELECTION

- | | | | |
|-----|---|---------|--|
| 13. | subway
cave
well
pit | are all | A. openings in the ground
B. animal homes
C. means of travel |
| 14. | North
South
East
West | are all | A. directions
B. poles
C. climates |
| 15. | dictionary
encyclopedia
atlas
almanac | are all | A. biography books
B. story books
C. reference books |
| 16. | seat belt
stair rail
bumper
chain lock | are all | A. fastening devices
B. mechanical devices
C. safety devices |
| 17. | peppermint
lemon
vanilla
orange | are all | A. spices
B. flavors
C. colors |
| 18. | pretty
tall
tired
long | are all | A. adjectives
B. nouns
C. feelings |

GO ON TO THE NEXT PAGE

CLASS NAME SELECTION

19. brick
ranch
frame
stone

are all

- A. construction tools
- B. houses
- C. offices

20. lake
well
pond
ocean

are all

- A. places where fish live
- B. man-made bodies of water
- C. sources of drinking water

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

CONCEALED WORDS

DIRECTIONS

This is a test to see how well you can tell what a word is after parts of it have been erased. Look at the words printed below.

The word NORTH has been completely printed the first time; the second time parts of the letters have been erased.

north
north

Now look at the word below. Parts of the word have been erased. Try to figure out what the word is. Print your answer on the line beside the printed word.

parents _____

You should have written PARENTS. All the words in this test will be at least three letters long. No word will contain any capital letters. There are 20 words on the test. Be sure to answer every question. Print your answers neatly so that you will get credit for them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO.

Portions of this test have been adapted from concealed words Test--Cs-2
Copyright © 1962, E.T.S. All rights reserved. Adapted from Mutilated
Words by L. L. Thurstone.

CONCEALED WORDS

1. זינע _____

2. שווער _____

3. פאטער _____

4. אנשטאנד _____

5. אהער _____

6. פאטער _____

7. ווייניג _____

8. פאטער _____

9. רעגולער _____

10. פאטער _____

GO ON TO THE NEXT PAGE

CONCEALED WORDS

11. לִיגָלִין _____
12. וּשְׁמִינִי _____
13. קוֹלָא _____
14. מַשְׁחָאָה _____
15. מַשְׁחָאָה _____
16. טַיִלָּה _____
17. אֲחִינִי _____
18. מַשְׁחָאָה _____
19. מַשְׁחָאָה _____
20. מַשְׁחָאָה _____

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

DISEMVOVELLED WORDS

DIRECTIONS

This test is made up of 15 words. All the vowels are missing in these words. You are to make each word complete by choosing the correct vowel for each blank space. Each space for a missing vowel has a different number. The answer choices for each blank space are the vowels A, E, I, O, and U. Look at the KEY below to see what box number within a row has been assigned to each vowel. Below are two examples of words with missing vowels and the correct way to mark the answers.

KEY

If the missing vowel is A, mark box number 1
 If the missing vowel is E, mark box number 2
 If the missing vowel is I, mark box number 3
 If the missing vowel is O, mark box number 4
 If the missing vowel is U, mark box number 5

Example a: T
 1

1. 1 2 3 4 5

2. 1 2 3 4 5

3. 1 2 3 4 5

Example b: Y S T R D Y
 2 3 4

4. 1 2 3 4 5

For Example a the word is TO. (TA, IE, TI, TU are not words.) From the KEY you see that O is answer box number 4. The blank space where the O should be is numbered 1. Look at the row of boxes numbered 1. The fourth box has been marked correctly for the O that belongs in the missing space. The word for Example b is YESTERDAY. There are three missing vowels with spaces numbered 2, 3, and 4. The vowel for space 2 is E, and it has correctly been marked in the row of boxes numbered 2. The vowel for space 3 is E, and it has been correctly marked in the row of boxes numbered 3. The vowel for space 4 is A, and it has been correctly marked in the row of boxes numbered 4.

There are 15 words on the test, but there are 32 blank spaces. You will use 32 answer rows on the answer sheet. Notice that the word "yesterday" in the example above has 3 blank spaces where a vowel belongs. Each space has a different number and uses a different row of answer boxes. This will be true of the words on the test. Each blank space, not each word, is a separate question.

Decide on the correct vowels for each word. On the answer sheet find the row of boxes numbered the same as the blank space. Use the KEY to see what box number within a row to fill in for the missing vowel. Answer all 32 questions.

If there are any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

DISEMVOUELLED WORDS

If the missing vowel is A, mark box number 1
 If the missing vowel is E, mark box number 2
 If the missing vowel is I, mark box number 3
 If the missing vowel is O, mark box number 4
 If the missing vowel is U, mark box number 5

S D D L
 1 2

H N S T
 18 19

C N
 3 4 5

 L B W
 20 21

C N D L
 6 7

T H R D
 22 23

P R S N
 8 9

K N G D M
 24 25

S P L N T R
 10 11

M S C L
 26 27

C H P T R
 12 13

B N D G
 28 29 30

B R N
 14 15

P N C E
 31 32

Y N D R
 16 17

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
 DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET

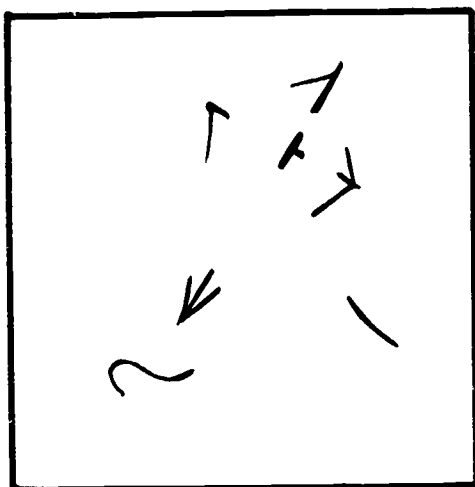
GESTALT COMPLETION

DIRECTIONS

This is a test of your ability to see a whole picture even though it is not completely drawn. You are to use your imagination to fill in the missing parts.

Look at each incomplete picture and try to see what it is. Write on the line beneath it a word or a few words telling what the picture is. You need not describe it in detail; just name the picture or its important parts.

Try the example pictures below.

AB

Picture A is a kite and picture B is an airplane.

There are 20 pictures on the test. Be sure to answer every question. Print your answers neatly so that you will get credit for them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

Portions of this test have been adapted from Gestalt Completion Test--C-1. Copyright © 1962 by E.T.S. All rights reserved.

Center No. C-03/Contract OE 5-10-154



1



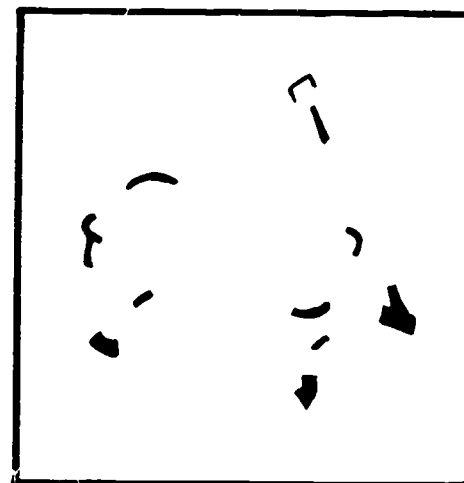
4



2



5



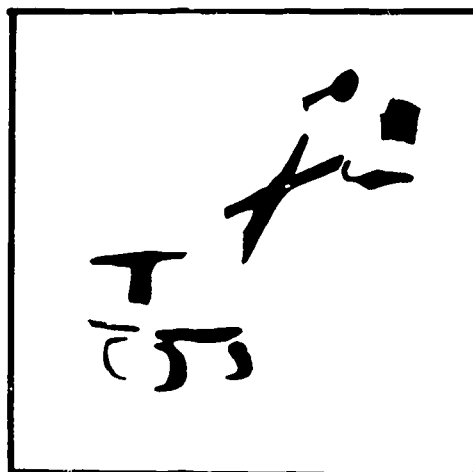
3



6



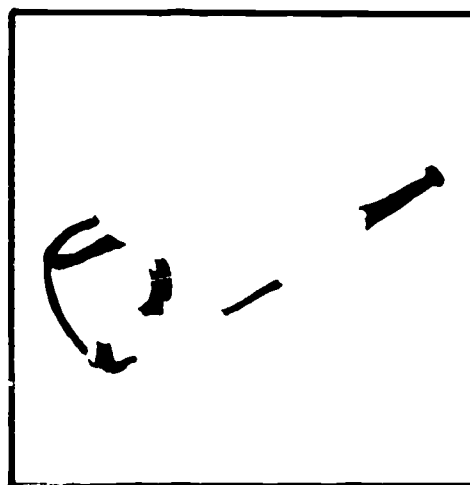
7



10



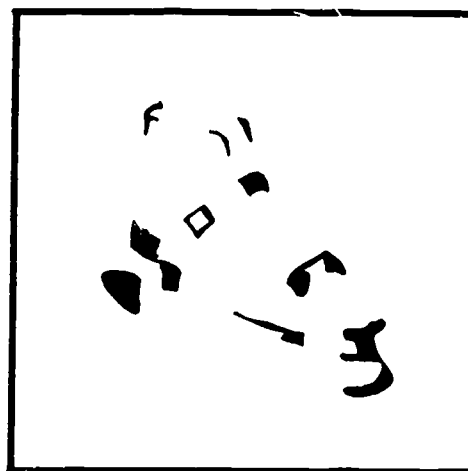
8



11



9



12

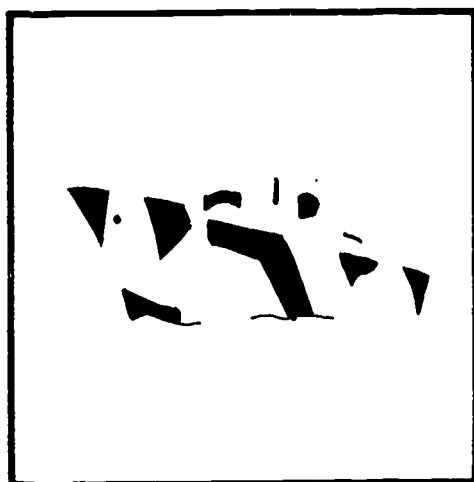
GESTALT COMPLETION



13



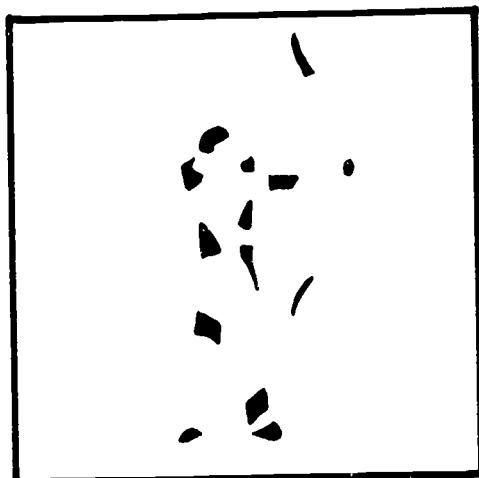
16



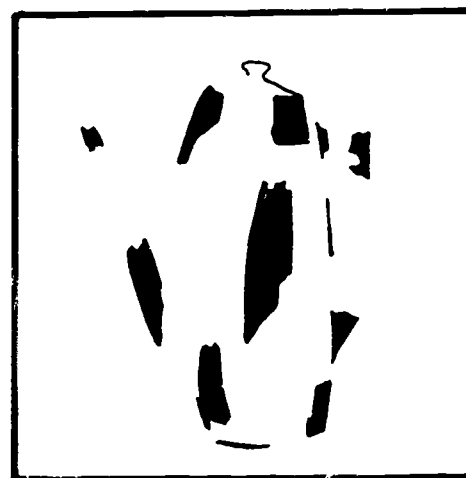
14



17



15



18

GO ON TO THE NEXT PAGE

GESTALT COMPLETION



19



20

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

LETTER CLASSIFICATION

DIRECTIONS

Each question has three (3) groups of letters in the left column that belong together. They form a class based upon structure or form of the letters. There are three (3) groups of letters on the right that are possible answers. You are to pick the one answer that belongs with the three groups of letters on the left. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. You are to fill in the answer box on the answer sheet that has the same number as the answer you picked.

Here is an example:

I. AAA
CCC
BBB

1. ABC
2. DDD
3. AAB

I 1 2 3 4 5

How are the three groups of letters on the left alike? They all have three letters that are the same. Which one letter group on the right is like them? 2. DDD has all three letters that are the same. 1. ABC has three different letters and 3. AAB has only two letters that are the same and one that is different. The correct answer is 2. The 2 - box has been marked correctly above.

There are 20 questions. Answer all of them. Remember there are many different ways the letter groups are alike.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

LETTER CLASSIFICATION

Which group of letters on the right belongs with the groups on the left?

- | | | | |
|--------------------------|-------------------------------|---------------------------|--------------------------------|
| 1. AAB
AAC
BBA | 1. ACC
2. BBC
3. CBC | 11. DAAA
ABBB
BCCC | 1. CBCC
2. BBBA
3. CDDD |
| 2. ABA
BAB
DBD | 1. CAC
2. DDC
3. CBB | 12. AABB
CCDD
BBDD | 1. DDCC
2. ACCA
3. RDBD |
| 3. AAD
ABA
AAC | 1. ABD
2. BAB
3. ACA | 13. BABC
ABAD
CBCA | 1. CADA
2. BABD
3. ABCC |
| 4. CBA
BCA
ABC | 1. ACB
2. ABA
3. CCB | 14. CCBC
AABA
EEBE | 1. DDBD
2. EEA E
3. AABC |
| 5. CAC
BCC
CBC | 1. CAA
2. CCA
3. BCB | 15. ABBA
CDDC
BCCB | 1. BBCC
2. AAB B
3. ADDA |
| 6. ABCC
CDAA
BDAA | 1. BABC
2. ADBB
3. AACB | 16. ACAA
BCBB
BDFB | 1. ADDA
2. ABAA
3. AABA |
| 7. ABEA
ACAB
EBAA | 1. ADBC
2. ABCB
3. AACB | 17. BADB
DEBD
CADC | 1. BCDE
2. DCDB
3. ABCA |
| 8. ACBD
CABD
BCDA | 1. DCAB
2. ACBA
3. CBBD | 18. BDBE
CABB
EBCB | 1. BBAE
2. ABAD
3. CCDB |
| 9. AABC
BBCA
BBDA | 1. BADA
2. AACD
3. ACBB | 19. ABBC
CDD B
DAAB | 1. ABDA
2. CAAC
3. ACCB |
| 10. BADA
ABCB
CDBD | 1. DCBC
2. ACAB
3. BBAD | 20. BBCB
ACAA
CDDD | 1. BBAB
2. DADD
3. EEEC |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

LETTER GROUPING

DIRECTIONS

For each question there are 4 groups of letters. Three (3) of these groups follow the same pattern. The pattern is based on the arrangement of the letters. One group of letters does not follow this pattern. You are to decide which group does not belong. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. Fill in the box that has the same number as the group you picked.

There are several different types of patterns. Here is one example:

I. 1. AAA 2. BBB 3. CCC 4. ABC I. ☒ 4

Which group of letters does not follow the pattern? Every group except "4" has three letters that are the same. Group "4" does not belong. The 4-box is marked correctly above.

There are 20 questions. Answer all of them. Remember there are many different kinds of patterns to find.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

LETTER GROUPING

Which one letter group does not belong with the other three?

- | | | | | |
|-----|---------|----------|---------|---------|
| 1. | 1. AAB | 2. ACC | 3. AAC | 4. BBA |
| 2. | 1. ABA | 2. BAB | 3. CCB | 4. CBC |
| 3. | 1. ABA | 2. CBA | 3. BCA | 4. ABC |
| 4. | 1. AAD | 2. ABA | 3. AAC | 4. ABD |
| 5. | 1. CAC | 2. ABC | 3. BCC | 4. CCA |
| 6. | 1. BABC | 2. ABCC | 3. CDAA | 4. BDAA |
| 7. | 1. ABEA | 2. ADBC | 3. ACAB | 4. AAEB |
| 8. | 1. ACBD | 2. CABD | 3. ACBA | 4. ACDB |
| 9. | 1. BADA | 2. AABC | 3. BBCA | 4. BBDA |
| 10. | 1. BADA | 2. ABCB | 3. ABDB | 4. ACAB |
| 11. | 1. DAAA | 2. ABBC | 3. CBCC | 4. BCCC |
| 12. | 1. ACCA | 2. AABBC | 3. CCDD | 4. BBDD |
| 13. | 1. BABC | 2. CADA | 3. BABD | 4. ABAD |
| 14. | 1. CCBC | 2. AABA | 3. DDBD | 4. EEAE |
| 15. | 1. ABBA | 2. CDDC | 3. BBCC | 4. ADDA |
| 16. | 1. ACAA | 2. ADDA | 3. BCBB | 4. BDBB |

GO ON TO THE NEXT PAGE

LETTER GROUPING

Which one letter group does not belong with the other three?

- | | | | | |
|-----|---------|---------|---------|---------|
| 17. | 1. BADB | 2. BCDE | 3. DEBD | 4. CADC |
| 18. | 1. BDBE | 2. CABB | 3. EBCB | 4. ABAD |
| 19. | 1. ABBC | 2. ABDA | 3. CDDB | 4. DAAB |
| 20. | 1. EEEA | 2. BBCE | 3. ACAA | 4. CDDD |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

LETTER TRIANGLE

DIRECTIONS

Each question is like a triangle of letters. The alphabetical order of the letters forms some kind of a pattern. One letter is missing from this pattern. You are to figure out the pattern and decide what letter is missing. There are three letters given on the right. These are the possible answers for that question. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. Fill in the answer box that has the same number as the answer you picked.

There are several patterns of letter triangles in the test. Here are two examples:

Example I. A

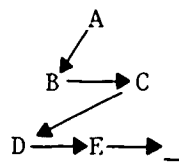
B C

D E _

1. F
2. G
3. J

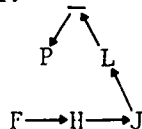
I. ☒ 1. ☐ 2. ☐ 3. ☐

What are the letters used in this triangle? How are they arranged?



A, B, C, D, and E immediately follow each other in the alphabet. The arrows show the direction of this pattern. The blank space follows the letter E. F follows E in the alphabet. F is the answer. Its number is 1 in the list of possible answers. The 1-box has been marked correctly above.

Example II.



1. O
2. N
3. M

II. ☐ 1. ☒ 2. ☐ 3. ☐

The arrows show the direction of this pattern. It begins with F and the next letter is H. So one letter has been skipped. This is true for the rest of the letters included. Just every other letter is used. The 2-box has been marked for the correct answer which is N.

There are 20 triangles. Answer all of them. Remember there are many different patterns. The letters in each question form one pattern.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

LETTER TRIANGLE

What is the missing letter?

- | | |
|---|-------------------------------------|
| <p>1.</p> <p style="margin-left: 100px;">Q</p> <p style="margin-left: 80px;">M _</p> <p style="margin-left: 60px;">L N O</p> | <p>1. P</p> <p>2. R</p> <p>3. K</p> |
| <p>2.</p> <p style="margin-left: 100px;">Q</p> <p style="margin-left: 80px;">S R</p> <p style="margin-left: 60px;">V U _</p> | <p>1. W</p> <p>2. T</p> <p>3. V</p> |
| <p>3.</p> <p style="margin-left: 100px;">N</p> <p style="margin-left: 80px;">Q O</p> <p style="margin-left: 60px;">S _ P</p> | <p>1. L</p> <p>2. T</p> <p>3. R</p> |
| <p>4.</p> <p style="margin-left: 100px;">K</p> <p style="margin-left: 80px;">O L</p> <p style="margin-left: 60px;">P N _</p> | <p>1. J</p> <p>2. Q</p> <p>3. M</p> |
| <p>5.</p> <p style="margin-left: 100px;">C</p> <p style="margin-left: 80px;">D _</p> <p style="margin-left: 60px;">E F A</p> | <p>1. B</p> <p>2. H</p> <p>3. G</p> |

GO ON TO THE NEXT PAGE

LETTER TRIANGLE

What is the missing letter?

6.

—
 F H
 G I J

1. I
2. D
3. E

7.

X
 W V
 U — S

1. Y
2. R
3. T

8.

K
 M L
 P — N

1. Q
2. O
3. J

9.

K
 — E
 G C A

1. I
2. J
3. H

10.

M
 K —
 J I H

1. G
2. L
3. N

GO ON TO THE NEXT PAGE

LETTER TRIANGLE

What is the missing letter?

- | | | |
|-----|--|---|
| 11. | <div style="text-align: center;">E</div> <div style="text-align: center;">1 F</div> <div style="text-align: center;">_ H G</div> | <div style="text-align: center;">1. J</div> <div style="text-align: center;">2. K</div> <div style="text-align: center;">3. D</div> |
| 12. | <div style="text-align: center;">U</div> <div style="text-align: center;">V W</div> <div style="text-align: center;">Z _ X</div> | <div style="text-align: center;">1. Y</div> <div style="text-align: center;">2. U</div> <div style="text-align: center;">3. T</div> |
| 13. | <div style="text-align: center;">K</div> <div style="text-align: center;">E _</div> <div style="text-align: center;">A C G</div> | <div style="text-align: center;">1. J</div> <div style="text-align: center;">2. I</div> <div style="text-align: center;">3. D</div> |
| 14. | <div style="text-align: center;">L</div> <div style="text-align: center;">_ K</div> <div style="text-align: center;">N O P</div> | <div style="text-align: center;">1. J</div> <div style="text-align: center;">2. Q</div> <div style="text-align: center;">3. M</div> |
| 15. | <div style="text-align: center;">N</div> <div style="text-align: center;">H L</div> <div style="text-align: center;">_ F J</div> | <div style="text-align: center;">1. K</div> <div style="text-align: center;">2. E</div> <div style="text-align: center;">3. D</div> |

GO ON TO THE NEXT PAGE

LETTER TRIANGLE

What is the missing letter?

16. G 1. J
 M 2. K
 3. Y
 V S P

17. H 1. D
 F J 2. E
 3. O
 _ N L

18. _ 1. O
 S T 2. V
 3. U
 P Q R

19. K 1. D
 J G 2. E
 3. I
 _ H F

20. P 1. F
 H J 2. G
 3. L
 A D _

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
 DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

NUMBER CLASS EXTENSION

DIRECTIONS

For each question there is a set of 4 numbers. The numbers in the set are related in some way. Beside the set of numbers are three answer choices. Find the relationship between the set of numbers and then pick the one answer choice that is related in the same way to the set of four numbers. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. You are to fill in the answer box on the answer sheet that has the same letter as the answer you picked.

Here are two examples:

Example I. 3 A. 6
 9 B. 2
 12 C. 13
 21

Look at the 4 numbers on the left. How are these numbers related? Each number is divisible by 3. Now, which choice (on the right) is divisible by 3? 6 is the correct answer. Its letter is A. The A-box below has been marked correctly:

I. ☒ A ☐ B ☐ C ☐ D

Example II. 2 A. 9
 5 B. 8
 11 C. 7
 3

Look at the 4 numbers on the left. How are these numbers related? Each number is a prime number (it is divisible only by itself and 1). Which choice is a prime number? 7 is the correct answer. Its letter is C. The C-box has been marked correctly:

II. ☐ A ☐ B ☒ C ☐ D

Look at each question carefully. There are lots of different ways that the numbers can be related.

There are 20 questions on this test. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

NUMBER CLASS EXTENSION

Which number on the right belongs with the four numbers on the left?

1. 20 A. 45
 40 B. 24
 25 C. 16
 10

7. $\frac{1}{4}$ A. $\frac{1}{12}$
 $\frac{1}{8}$ B. $\frac{1}{10}$
 $\frac{1}{16}$ C. $\frac{1}{6}$
 $\frac{1}{20}$

2. 1 A. 6
 5 B. 9
 2 C. 3
 11

8. 21 A. 38
 81 B. 12
 51 C. 33
 11

3. $\frac{1}{4}$ A. $\frac{1}{3}$
 $\frac{1}{10}$ B. $\frac{1}{11}$
 $\frac{1}{12}$ C. $\frac{1}{6}$
 $\frac{1}{8}$

9. 31 A. 22
 17 B. 4
 3 C. 2
 7

4. 3 A. 9
 19 B. 23
 5 C. 21
 17

10. 21 A. 18
 42 B. 28
 14 C. 36
 63

5. 9 A. 12
 21 B. 13
 6 C. 14
 18

11. $\frac{1}{20}$ A. $\frac{1}{5}$
 $\frac{1}{15}$ B. $\frac{2}{5}$
 $\frac{1}{50}$ C. $\frac{1}{2}$
 $\frac{1}{10}$

6. 16 A. 25
 50 B. 22
 38 C. 43
 4

12. 14 A. 49
 26 B. 35
 20 C. 32
 56

GO ON TO THE NEXT PAGE

NUMBER CLASS EXTENSION

Which number on the right belongs with the four numbers on the left?

13. 29 A. 32
 37 B. 33
 35 C. 34
 31

17. 23 A. 13
 45 B. 32
 67 C. 54
 89

14. 2 A. 26
 29 B. 18
 7 C. 23
 13

18. 11 A. 9
 2 B. 15
 5 C. 19
 7

15. 28 A. 18
 6 B. 23
 42 C. 35
 20

19. 48 A. 15
 24 B. 18
 6 C. 38
 30

16. 19 A. 14
 23 B. 2
 37 C. 26
 11

20. 13 A. 9
 11 B. 5
 17 C. 21
 3

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

NUMBER CLASSIFICATION

DIRECTIONS

There are three (3) numbers in a row on the left for each question. For each group of three questions, there are five (5) possible answers on the right. The three numbers in a row on the left are alike in some way, based on structure or form. The way the numbers are alike has nothing to do with the value of the numbers. Decide how the three numbers are alike. Then choose one (1) number from the five on the right that is like the other three. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. Fill in the answer boxes numbered the same as the question you are working on. Fill in the answer box on the answer sheet that has the same letter as the answer you picked.

Here is an example of a group of three questions:

I. 21 24 27

 II. 79 89 19

 III. 22 33 55

A. 39
 B. 44
 C. 12
 D. 92
 E. 23

I. ☒ A ☐ B ☐ C ☐ D ☐ E
 II. ☐ A ☒ B ☐ C ☐ D ☐ E
 III. ☐ A ☒ B ☐ C ☐ D ☐ E

How are the three numbers of question I alike? The numbers 21, 24 and 27 all start with a 2. Which number on the right begins with a 2? The number 23 goes with the numbers on line I. Its letter is E. The E-box for question I is marked correctly above. How are the numbers in question II alike? They all end with 9. Which number on the right ends with 9? The correct answer is 39. Its letter is A. The A-box for question II is marked correctly above. How are the three numbers of question III alike? They are all double digits. Which number on the right is made up of two of the same digits. The correct answer is 44. Its letter is B. The B-box for question III is marked correctly above.

There are 10 groups of 3 questions. Answer all of them. You will use 30 rows of answer boxes.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

NUMBER CLASSIFICATION

Which number on the right goes with each set of three numbers on the left?

1.	12383	47383	23383	A.	27626
				B.	20753
				C.	94353
				D.	24583
				E.	69383
2.	27850	27343	27011		
3.	14057	64559	24358		
4.	8861	4288	1880	A.	4395
				B.	9666
				C.	8948
				D.	4885
				E.	4391
5.	3594	4935	3945		
6.	2221	7333	6660		
7.	280	247	263	A.	301
				B.	128
				C.	738
				D.	782
				E.	224
8.	171	481	691		
9.	728	798	748		
10.	78	79	76	A.	52
				B.	28
				C.	74
				D.	87
				E.	36
11.	42	22	32		
12.	31	73	43		
13.	6	695	643	A.	115
				B.	82
				C.	750
				D.	16
				E.	67
14.	5	75	885		
15.	21	2	629		

GO ON TO THE NEXT PAGE

NUMBER CLASSIFICATION

Which number on the right goes with each set of three numbers on the left?

16. 2139 27396 2939

A. 3784

B. 15603

C. 15063

D. 24390

E. 20324

17. 26784 57784 1784

18. 1560 15602 15607

19. 6943 826 8861

A. 3201

B. 30521

C. 2049

D. 293

E. 40601

20. 5132 235 5632

21. 289 109 48769

22. 89 4689 17289

A. 224

B. 1761

C. 187

D. 389

E. 12890

23. 17 173 17349

24. 234 2067 27

25. 1734 69341 20347

A. 1534

B. 3491

C. 2678

D. 7348

E. 69733

26. 16978 55578 14478

27. 2970 49323 1954

28. 324 38974 314

A. 34886

B. 91840

C. 31056

D. 41054

E. 36544

29. 318 41872 618

30. 256 89756 156

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

NUMBER EXCLUSION

DIRECTIONS

There are four (4) numbers for each question. Three (3) of these numbers belong together. They form a class based upon the structure or form of the numbers. The value of the numbers is not important. One number does not belong to this class. You are to pick the number that does not belong. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. You are to fill in the answer box on the answer sheet that has the same letter as the answer you picked.

Here is an example:

I. A. 22 B. 33 C. 26 D. 55

I. ☐ A ☒ B ☐ C ☐ D

Three of these belong to a class. Which number does not belong?

A. 22, B. 33, and D. 55 are all two of the same digits. C. 26 is not. Its letter is C. The C-box is marked correctly above.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

NUMBER EXCLUSION

Which number does not belong?

- | | | | | |
|-----|----------|----------|----------|-----------|
| 1. | A. 42 | B. 28 | C. 32 | D. 52 |
| 2. | A. 666 | B. 999 | C. 777 | D. 969 |
| 3. | A. 413 | B. 393 | C. 23 | D. 63 |
| 4. | A. 5 | B. 75 | C. 750 | D. 885 |
| 5. | A. 384 | B. 343 | C. 34 | D. 3401 |
| 6. | A. 8091 | B. 6041 | C. 4101 | D. 5011 |
| 7. | A. 2194 | B. 2942 | C. 2138 | D. 2162 |
| 8. | A. 14257 | B. 94583 | C. 64159 | D. 24358 |
| 9. | A. 8861 | B. 4288 | C. 8948 | D. 1880 |
| 10. | A. 16 | B. 6 | C. 695 | D. 643 |
| 11. | A. 79364 | B. 73 | C. 5356 | D. 5954 |
| 12. | A. 41374 | B. 43645 | C. 4694 | D. 48724 |
| 13. | A. 20324 | B. 2139 | C. 2939 | D. 27396 |
| 14. | A. 15602 | B. 15063 | C. 1560 | D. 156204 |
| 15. | A. 21111 | B. 11134 | C. 20111 | D. 71114 |

GO ON TO THE NEXT PAGE

NUMBER EXCLUSION

Which number does not belong?

- | | | | | |
|-----|---------|----------|----------|----------|
| 16. | A. 318 | B. 41872 | C. 9184 | D. 9813 |
| 17. | A. 877 | B. 566 | C. 433 | D. 212 |
| 18. | A. 2970 | B. 679 | C. 49323 | D. 193 |
| 19. | A. 1734 | B. 69341 | C. 3491 | D. 10347 |
| 20. | A. 256 | B. 99756 | C. 3056 | D. 35608 |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

NUMBER RELATIONS

DIRECTIONS

For each question there are four (4) pairs of numbers. Three (3) of the pairs are alike in some way according to the value of the numbers. One pair is different. You are to decide which pair does not belong with the other three. On the answer sheet, find the row of answer boxes that has the same number as the question you are working on. Fill in the answer box that has the same letter as the answer you picked.

In the test there are several ways in which the pairs of numbers may be alike. Here is one example:

- I. A. 3, 4
 B. 1, 2
 C. 4, 6
 D. 2, 3

I. ☐ A ☒ B ☐ C ☐ D

Look at the pairs of numbers. How are three of them alike?

- A. 3, 4 $3 + 1 = 4$
 B. $\overline{1}$, $\overline{2}$ $\overline{1} + 1 = \overline{2}$
 C. $\overline{4}$, $\overline{6}$ $\overline{4} + 1 = \overline{5}$, but the second number in C. is 6.
 D. $\overline{2}$, $\overline{3}$ $\overline{2} + 1 = \overline{3}$

Pairs A, B, and D are alike. Adding the number 1 to the first number of the pairs gives the second number of that pair. C. is different. The C-box above has been marked correctly.

Now look at another example question.

- II. A. 3, 9
 B. 5, 10
 C. 6, 12
 D. 2, 4

II. ☒ A ☐ B ☐ C ☐ D

Which number pair does not belong? A is the correct answer. In B, C, and D the first number is multiplied by 2 to get the second number. The A-box has been marked correctly above.

There are 20 questions. Answer all of them. Remember there are several ways the pairs of numbers may be alike.

If there are any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

NUMBER RELATIONS

In each group, which number pair does not belong?

- | | | | |
|----|----------|-----|-----------|
| 1. | A. 7, 2 | 6. | A. 9, 4 |
| | B. 10, 4 | | B. 6, 1 |
| | C. 13, 7 | | C. 8, 2 |
| | D. 8, 2 | | D. 10, 5 |
| | | | |
| 2. | A. 5, 7 | 7. | A. 3, 6 |
| | B. 1, 2 | | B. 2, 10 |
| | C. 3, 5 | | C. 4, 8 |
| | D. 4, 6 | | D. 5, 10 |
| | | | |
| 3. | A. 20, 4 | 8. | A. 12, 18 |
| | B. 10, 2 | | B. 3, 9 |
| | C. 15, 3 | | C. 11, 16 |
| | D. 5, 5 | | D. 1, 7 |
| | | | |
| 4. | A. 2, 6 | 9. | A. 4, 1 |
| | B. 5, 8 | | B. 9, 4 |
| | C. 1, 5 | | C. 7, 4 |
| | D. 3, 7 | | D. 8, 5 |
| | | | |
| 5. | A. 6, 18 | 10. | A. 16, 4 |
| | B. 3, 9 | | B. 4, 1 |
| | C. 2, 5 | | C. 8, 2 |
| | D. 5, 15 | | D. 5, 1 |

GO ON TO THE NEXT PAGE

NUMBER RELATIONS

In each group, which number pair does not belong?

11. A. 10, 2
 B. 8, 1
 C. 12, 5
 D. 11, 4

16. A. 4, 20
 B. 2, 8
 C. 3, 12
 D. 6, 24

12. A. 9, 3
 B. 6, 1
 C. 12, 2
 D. 24, 4

17. A. 15, 5
 B. 6, 2
 C. 9, 3
 D. 10, 4

13. A. 5, 36
 B. 2, 14
 C. 4, 28
 D. 3, 21

18. A. 12, 9
 B. 4, 1
 C. 7, 3
 D. 8, 5

14. A. 21, 3
 B. 7, 1
 C. 9, 3
 D. 14, 2

19. A. 11, 21
 B. 8, 16
 C. 3, 6
 D. 7, 14

15. A. 9, 10
 B. 6, 8
 C. 4, 5
 D. 2, 3

20. A. 2, 8
 B. 1, 3
 C. 3, 9
 D. 2, 6

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NO WORK ON ANY OTHER TEST IN THE BOOKLET.

NUMBER SERIES

DIRECTIONS

In each question in this test there is a series of numbers given in a certain order. You are to discover the order (or way) in which the series of numbers is arranged and then find the number at the right which should come next.

Look at the first example.

EXAMPLE I. 7 8 9 10 _____

A.	7
B.	8
C.	10
D.	11
E.	12

In this series of numbers (7, 8, 9, 10) each number is 1 more than the number before it. The next number after 10 should be 11. The letter in front of 11 is D. The D-box has been marked correctly.

I. ☐ A ☒ B ☐ C ☐ D ☐ E

Here is another example. Which number should come next?

EXAMPLE II. 8 8 7 7 6 6 _____

A.	4
B.	5
C.	6
D.	7
E.	8

The next number should be 5. Its letter is B, so the B-box below has been marked correctly.

II. ☐ A ☒ B ☐ C ☐ D ☐ E

Look at each question carefully. There are many different orders of numbers. Choose the best answer for each question. There are 20 questions. Be sure to answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

NUMBER SERIES

Choose the best answer to fill in the blank.

- | | | | | | | | | | |
|---|-----|-----|-----|-----|-------|--------|-------|--------|-------|
| 1 | 10 | 8 | 6 | 4 | _____ | A. 5 | | | |
| | | | | | | B. 4 | | | |
| | | | | | | C. 3 | | | |
| | | | | | | D. 2 | | | |
| | | | | | | E. 1 | | | |
| 2 | 20 | 5 | 21 | 5 | _____ | A. 5 | | | |
| | | | | | | B. 15 | | | |
| | | | | | | C. 22 | | | |
| | | | | | | D. 25 | | | |
| | | | | | | E. 26 | | | |
| 3 | 2 | 6 | 9 | 11 | 15 | 18 | 20 | _____ | A. 22 |
| | | | | | | | | | B. 23 |
| | | | | | | | | | C. 24 |
| | | | | | | | | | D. 25 |
| | | | | | | | | | E. 26 |
| 4 | 15 | 26 | 37 | 48 | _____ | A. 12 | | | |
| | | | | | | B. 23 | | | |
| | | | | | | C. 51 | | | |
| | | | | | | D. 59 | | | |
| | | | | | | E. 68 | | | |
| 5 | 7 | 21 | 10 | 30 | 13 | 39 | _____ | A. 16 | |
| | | | | | | | | B. 19 | |
| | | | | | | | | C. 48 | |
| | | | | | | | | D. 92 | |
| | | | | | | | | E. 108 | |
| 6 | 20 | 22 | 17 | 19 | 14 | 16 | 11 | _____ | A. 15 |
| | | | | | | | | | B. 13 |
| | | | | | | | | | C. 12 |
| | | | | | | | | | D. 9 |
| | | | | | | | | | E. 6 |
| 7 | 782 | 682 | 582 | 482 | _____ | A. 382 | | | |
| | | | | | | B. 438 | | | |
| | | | | | | C. 542 | | | |
| | | | | | | D. 658 | | | |
| | | | | | | E. 682 | | | |

GO ON TO THE NEXT PAGE

NUMBER SERIES

Choose the best answer to fill in the blank.

- 8 2 8 14 20 ____
A. 16
B. 20
C. 22
D. 24
E. 26
- 9 1 12 123 ____
A. 12
B. 123
C. 1234
D. 234
E. 4
- 10 917 825 937 845 ____
A. 825
B. 856
C. 938
D. 947
E. 957
- 11 10 12 15 19 21 24 ____
A. 26
B. 27
C. 28
D. 29
E. 30
- 12 84 114 144 174 204 ____
A. 124
B. 234
C. 384
D. 404
E. 814
- 13 4 1 6 3 8 5 ____
A. 7
B. 9
C. 10
D. 11
E. 12
- 14 33 44 55 66 ____
A. 67
B. 76
C. 77
D. 88
E. 99

GO ON TO THE NEXT PAGE

NUMBER SERIES

Choose the best answer to fill in the blank.

- 15 4 6 3 6 ____
A. 1
B. 2
C. 3
D. 5
E. 6
- 16 1 1 3 2 2 4 3 3 ____
A. 1
B. 2
C. 4
D. 5
E. 6
- 17 30 25 21 18 ____
A. 28
B. 23
C. 20
D. 17
E. 16
- 18 19 28 37 46 ____
A. 51
B. 52
C. 53
D. 54
E. 55
- 19 501 642 503 644 ____
A. 505
B. 541
C. 604
D. 646
E. 705
- 20 2 3 5 8 ____
A. 8
B. 9
C. 10
D. 11
E. 12

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

OMELET TEST

DIRECTIONS

The order of the letters in each group can be changed to make a word. You are to change the order of the letters to make a word. Use each letter in the group. Print the word that you make in the space provided.

Here is an example: orf _____

What word can you make out of all the letters o,r,f? The only word that can be made is for. Print for on the line beside the letters.

There are 20 groups of letters. Change each group to a word.

Remember:

1. Print neatly
2. Put the word you make on the line provided

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

;

OMELET TEST

Change the order of the letters to form a word. Write the word in the blank space.

- | | |
|-----------------|-----------------|
| 1. karc _____ | 11. kils _____ |
| 2. tgfi _____ | 12. niser _____ |
| 3. ilob _____ | 13. hier _____ |
| 4. ngki _____ | 14. noev _____ |
| 5. klim _____ | 15. cieuj _____ |
| 6. lguy _____ | 16. erega _____ |
| 7. oonni _____ | 17. tearf _____ |
| 8. kkuns _____ | 18. roamy _____ |
| 9. txrea _____ | 19. skam _____ |
| 10. slasc _____ | 20. srifk _____ |

STOP

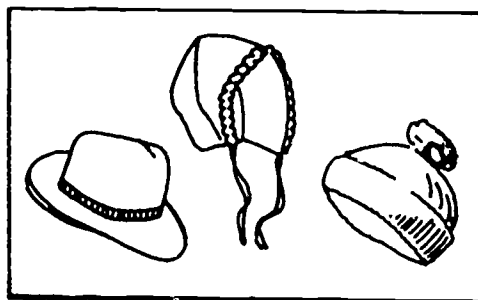
IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

PICTURE CLASS MEMORY

DIRECTIONS

For this test you will have 1 1/2 minutes to study a page of pictures. After studying the page of pictures for 1 1/2 minutes you will be asked to remember the kinds of pictures that you studied. On the study page there are 10 sets of pictures, with each set in a box. The three pictures in the set show objects that are alike in some way; these objects all belong to the same class.

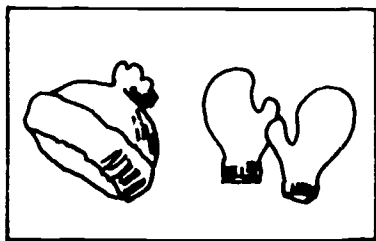
Look at this study example. It is a set of three pictures. The pictures are of a hat, a bonnet, and a cap. They are alike, since each is something that people wear on their heads. This is the "class."

Study Example:

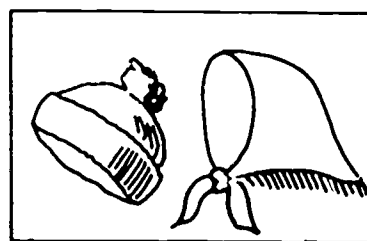
Your first task is to decide what class the group of three pictures belongs to. Then you will need to remember that class. You will not be able to look back when answering the questions about them.

Now look at these two test examples. They consist of two sets of two pictures each. The cap appears in both sets. In one set there is a pair of mittens pictured with a cap. You should decide whether or not

I.




II.



Directions (Continued):

these two pictures belong to the class that you studied. Do they? No. They are not both something that people wear on their heads. Cap and mittens are clothes that people wear for warmth. That is not the same as things people wear on their heads. The answer for the box with the cap and mittens is "no." The row of answer boxes for this question would look like this:

I.  F . . .

The F is for false, or "NO," answers.

Now look at the box with the cap and the scarf. What class of objects does this picture show? Is this the same class of objects as cap-hat-bonnet? Cap and scarf are things people wear on their heads. That is the same class as the cap, hat, and bonnet. Therefore, the answer for the box with the cap and scarf is "yes." The row of answer boxes for that question would look like this:

II.  T . . .

The T is for true, or "YES," and has been marked correctly.

On the study page you will see 10 sets of pictures. Look at these and study them very carefully so that you can remember the classes you have seen.

After 1 1/2 minutes I will tell you to turn the page, and you will find 2 test pages of 20 sets of pictures with 2 pictures in a set. Look at each set of 2 pictures and try to remember if it shows the same class as one that you saw on the study page. The answer for any set of pictures could be yes or no. If you think the class is the same as the one you remember, mark the T-box. If it is not the same, mark the F-box.

T means YES

F means NO

You will do this for all 20 of the questions.

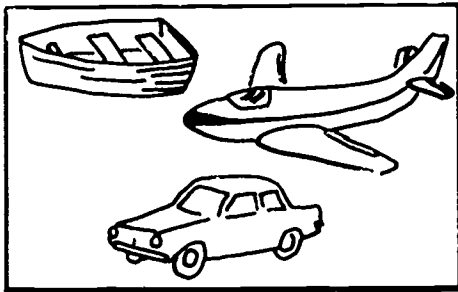
You must remember the ten classes from the 1 1/2 minutes of study time you will have. Once you turn the study page you cannot look back at it.

If you have any questions, ask them now.

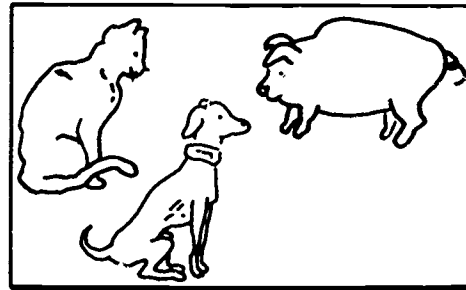
DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

Study Page

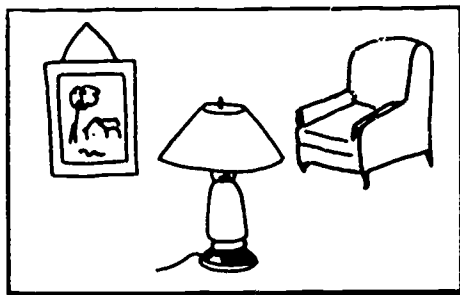
A.



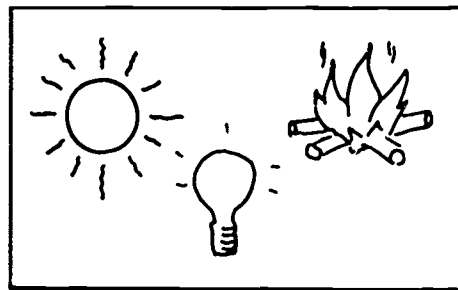
F.



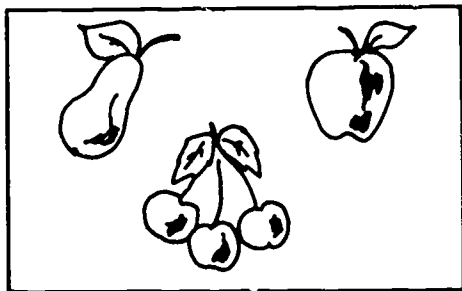
B.



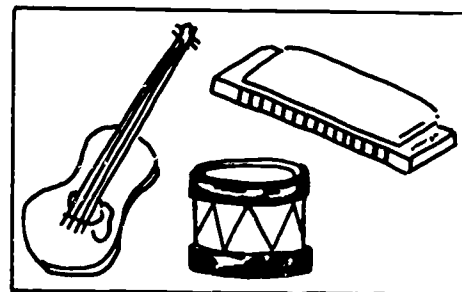
G.



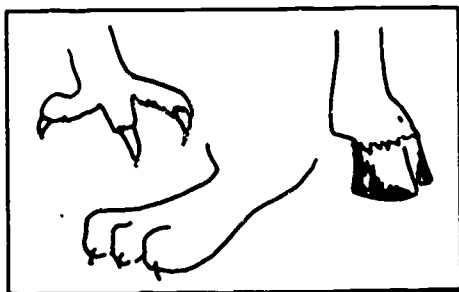
C.



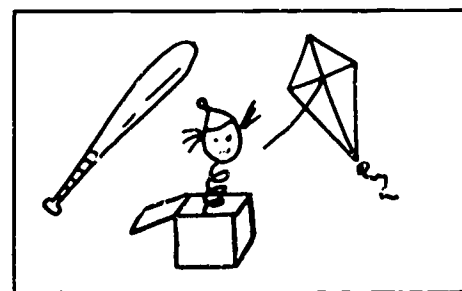
H.



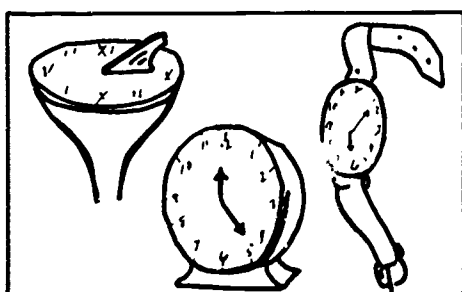
D.



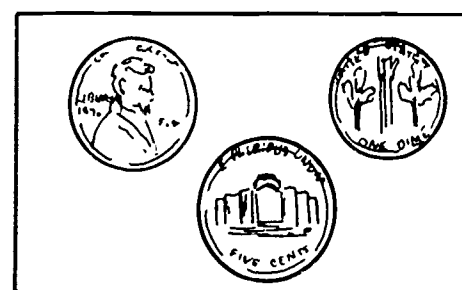
I.



E.



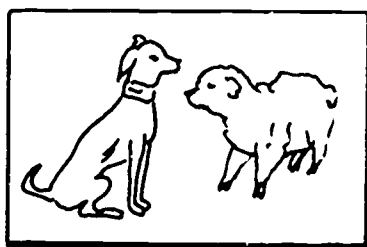
J.



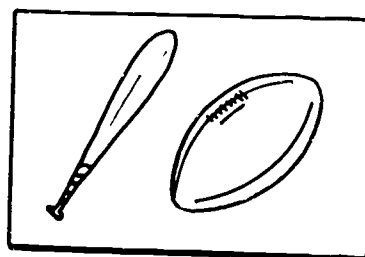
PICTURE CLASS MEMORY--Test Page

If the set of pictures belongs to a class you studied, mark the T-box.
If the set of pictures does NOT belong to a class you studied, mark
the F-box.

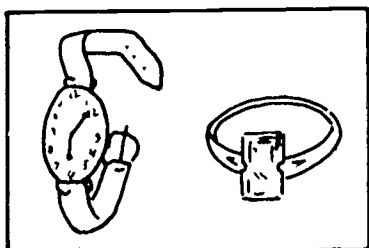
1.



6.



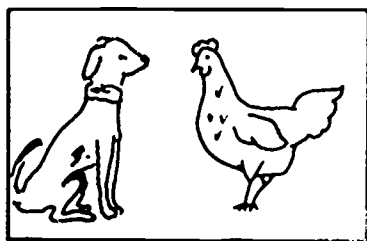
2.



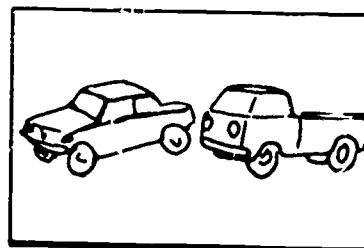
7.



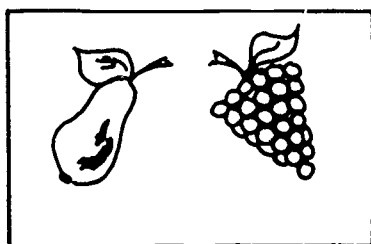
3.



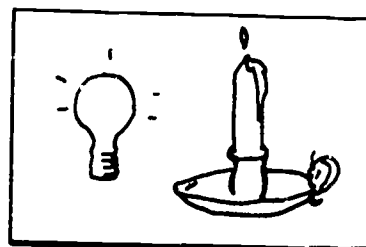
8.



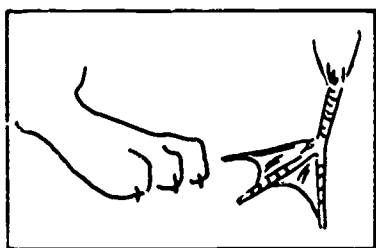
4.



9.



5.



10.



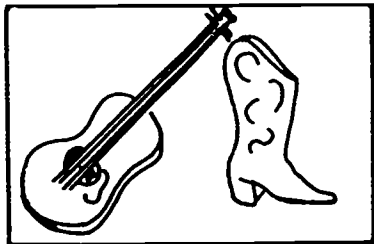
GO ON TO THE NEXT PAGE

PICTURE CLASS MEMORY--Test Page

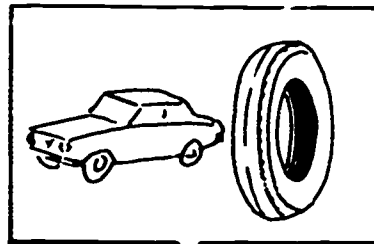
If the set of pictures belongs to a class you studied, mark the T-box.

If the set of pictures does NOT belong to a class you studied, mark the F-box.

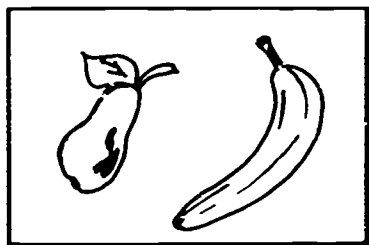
11.



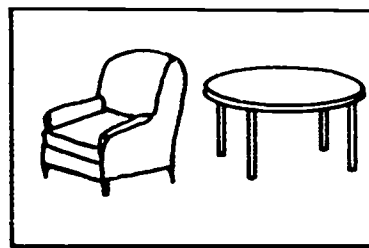
16.



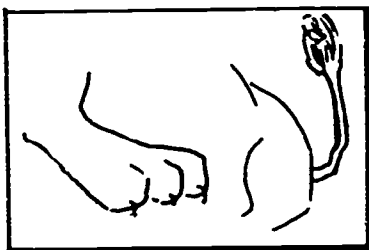
12.



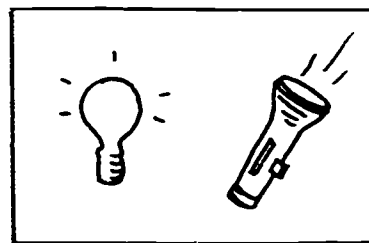
17.



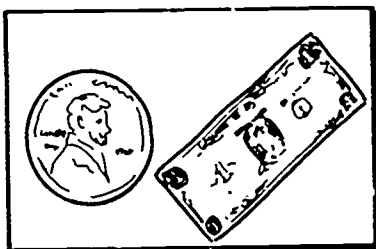
13.



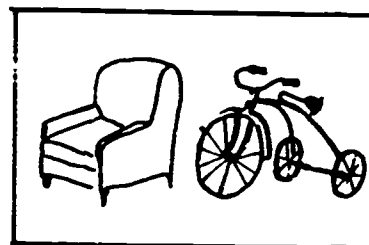
18.



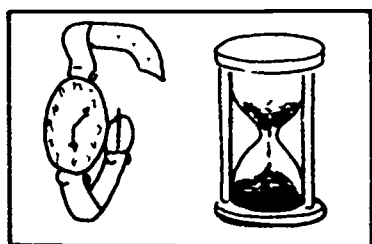
14.



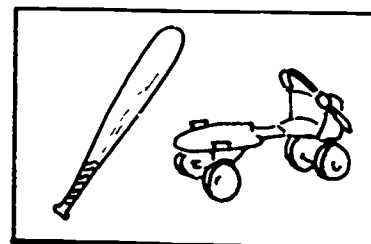
19.



15.



20.



END

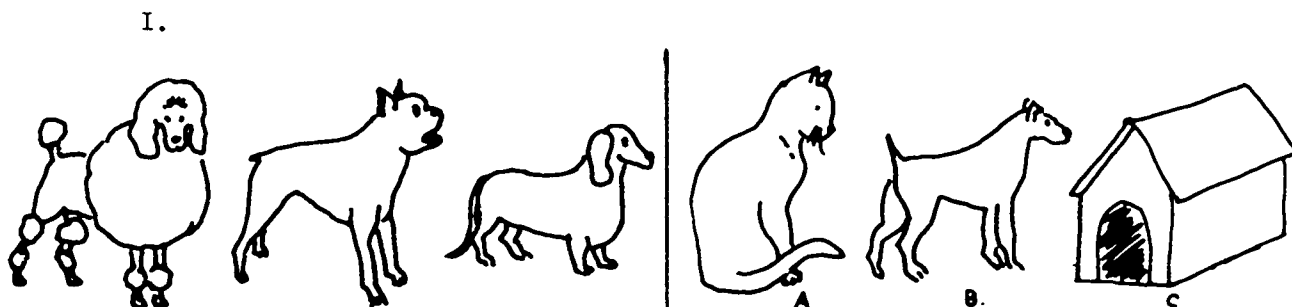
IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

PICTURE CLASSIFICATION

DIRECTIONS

In each question there are 3 pictures of objects on the left which are alike in some way. On the right are 3 other pictures. One of these belongs with the pictures on the left for the same reason that they belong together. Decide which picture on the right is the correct answer. On your answer sheet mark the answer box with the same letter as your answer.

Here is an example:



How are poodle, boxer and dachshund alike? They are all dogs. Which picture on the right belongs with them for the same reason that poodle, boxer and dachshund belong together?

B. Terrier is also a dog. It is the best answer. The answer box below has been marked correctly.

I. ☒ A ☐ B ☐ C

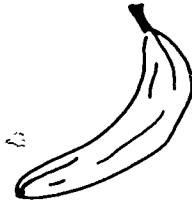
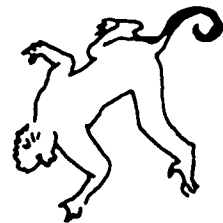
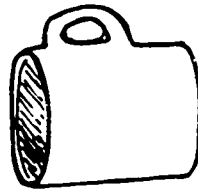
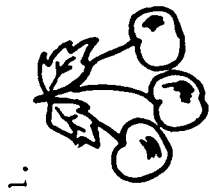
There are 20 questions. Be sure to answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

PICTURE CLASSIFICATION

Which picture on the right belongs with the 3 pictures on the left?



A.

B.

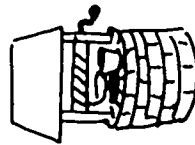
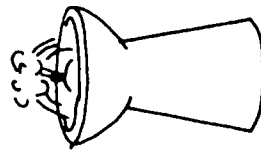
C.



A.

B.

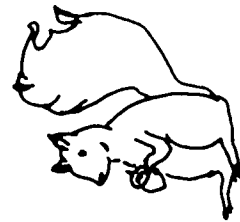
C.



A.

B.

C.



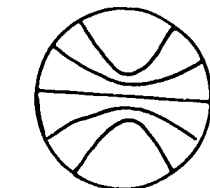
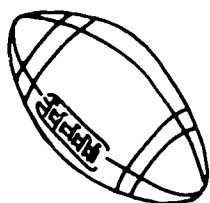
A.

B.

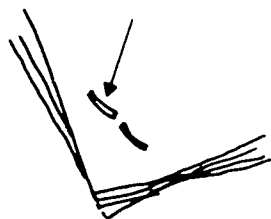
C.

PICTURE CLASSIFICATION

Which picture on the right belongs with the 3 pictures on the left?



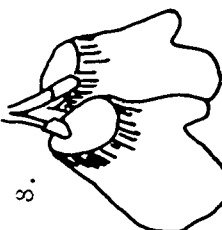
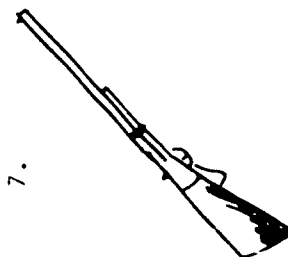
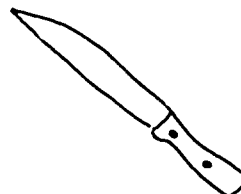
5.



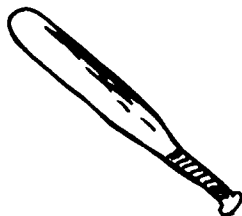
6.



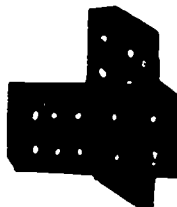
7.



8.



A.



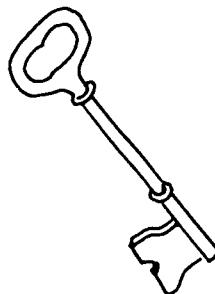
B.



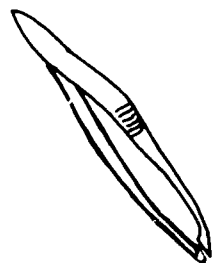
C.



A.



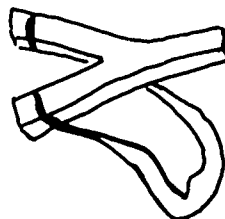
B.



C.



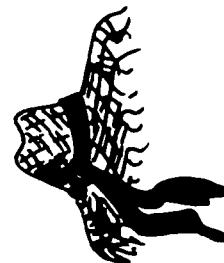
A.



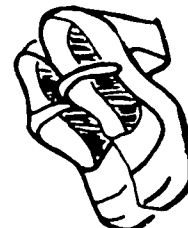
B.



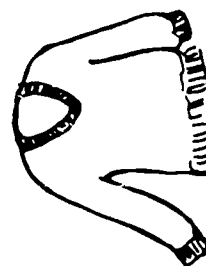
C.



A.



B.



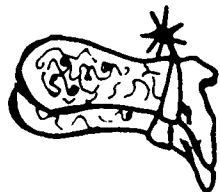
C.

GO ON TO THE NEXT PAGE

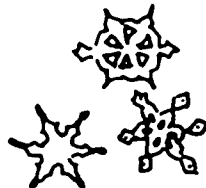
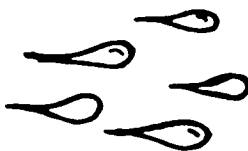
PICTURE CLASSIFICATION

Which picture on the right belongs with the 3 pictures on the left?

9.



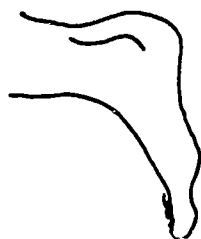
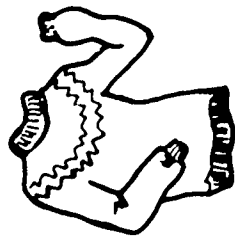
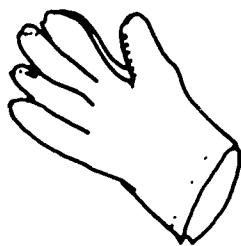
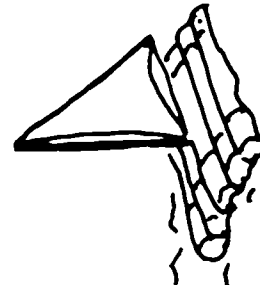
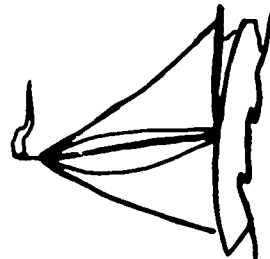
10.



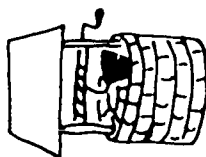
11.



12.



C.



C.

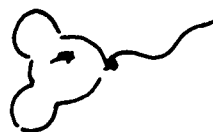
B.



B.



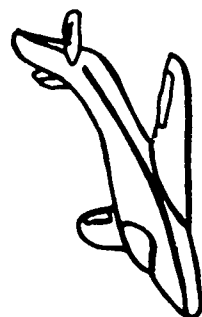
A.



B.



C.



A.

12.



A.



B.

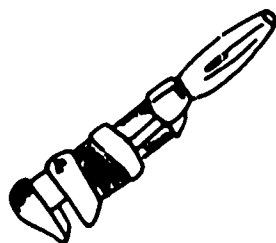
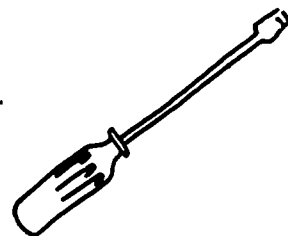
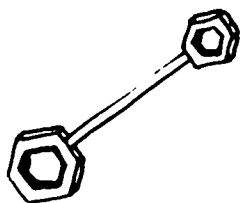


C.

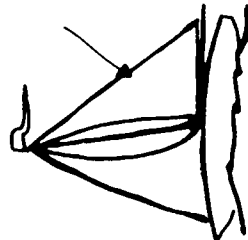
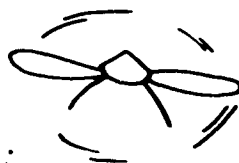
PICTURE CLASSIFICATION

Which picture on the right belongs with the 3 pictures on the left?

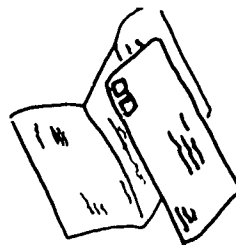
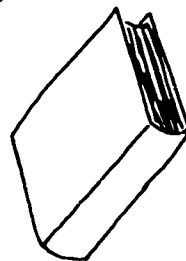
13.



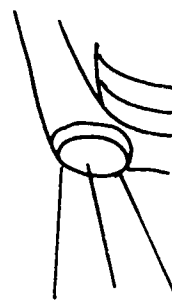
14.



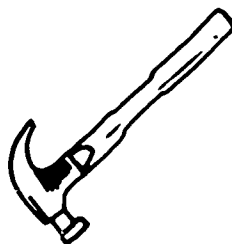
15.



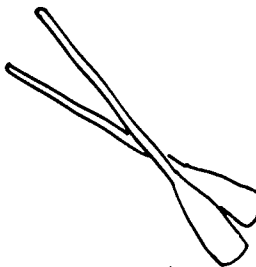
16.



A.



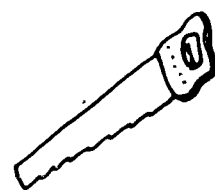
B.



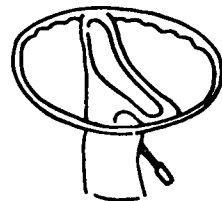
B.



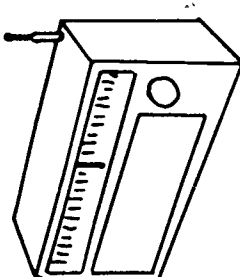
A.



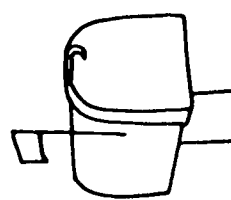
C.



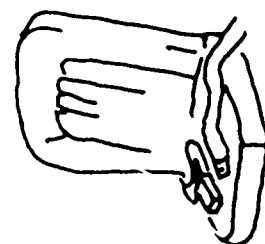
C.



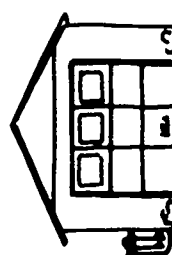
B.



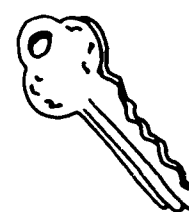
C.



A.



B.

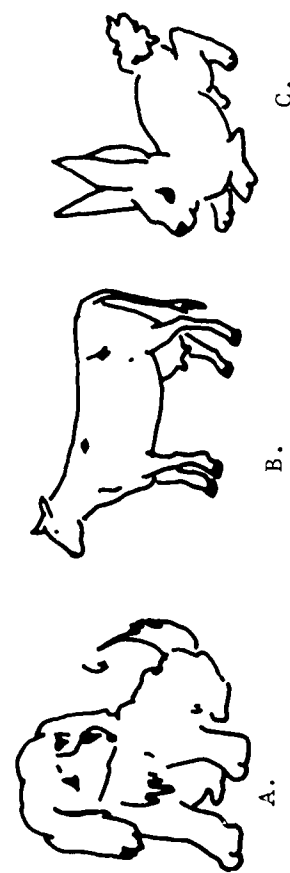
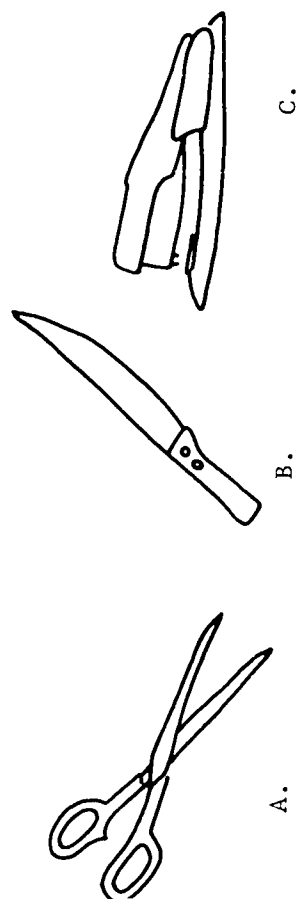
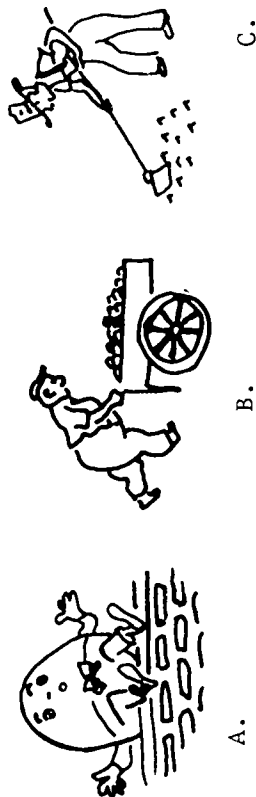
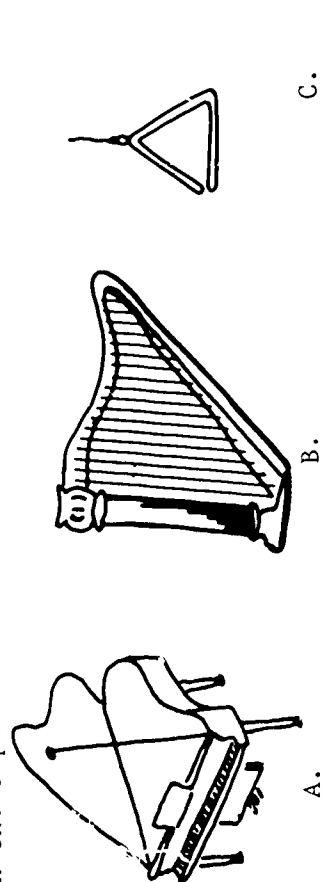
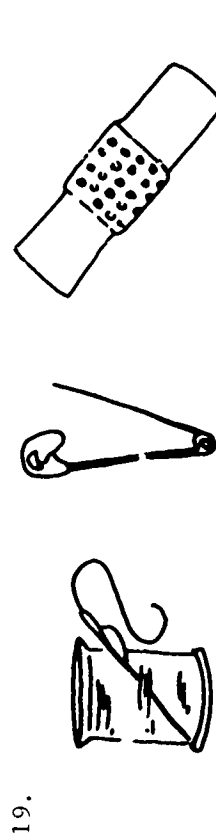
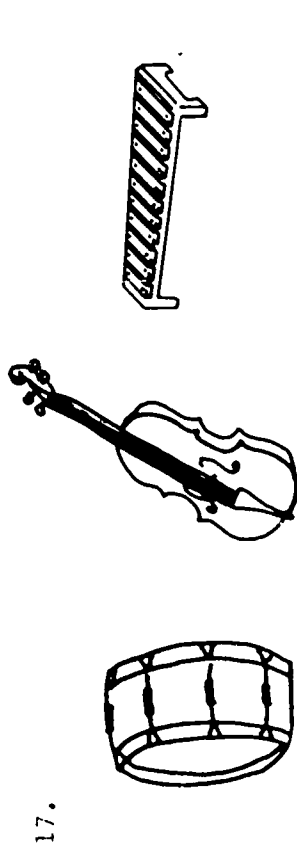


C.

GO ON TO THE NEXT PAGE

PICTURE CLASSIFICATION

Which picture on the right belongs with the 3 pictures on the left?



STOP

IF YOU FINISH BEFORE TIME IS CALLED YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

PICTURE EXCLUSION

DIRECTIONS

There are 4 pictures for each question. Three (3) of these pictures belong together. They form a class based on the meaning or use of what is pictured. One picture does not belong to this class. You are to find the picture that does not belong. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. You are to fill in the answer box on the answer sheet that has the same letter as the answer you picked.

Here is an example.

I.



a



b



c



d

Three of these belong to a class. Which picture does not belong? B. butterfly, C. bee, and D. dragonfly are all insects that fly. A. Ant is an insect, but it cannot fly. Its letter is A. The A-box is marked correctly below.

I. ☒ a ☐ b ☐ c ☐ d

There are 20 questions. Be sure to answer all of them.

If you have any questions, ask them now.

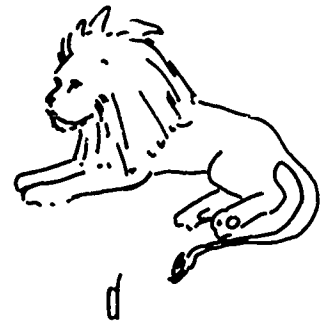
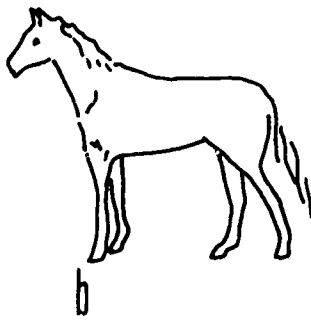
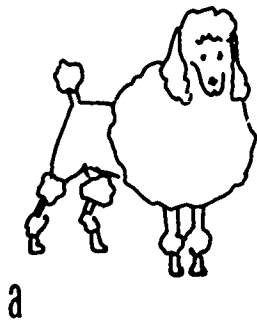
DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

PICTURE EXCLUSION

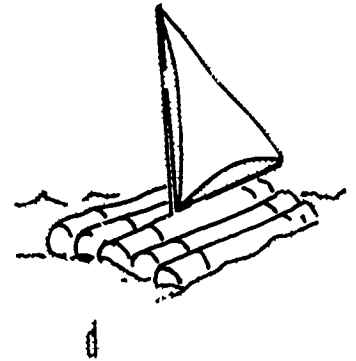
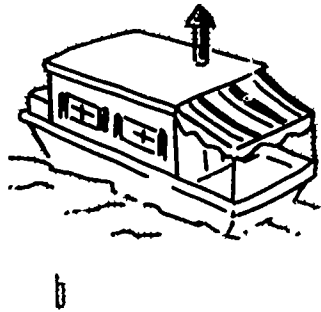
63

Which picture in each row does not belong?

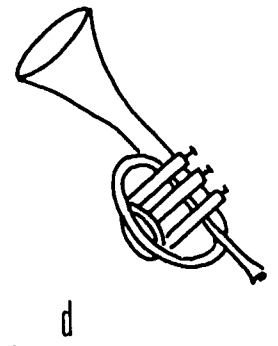
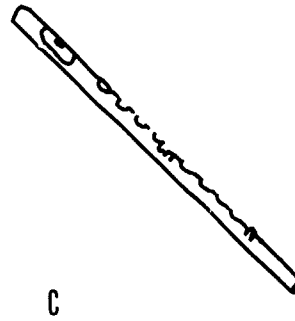
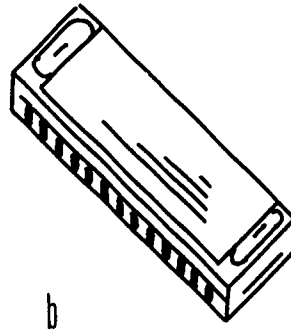
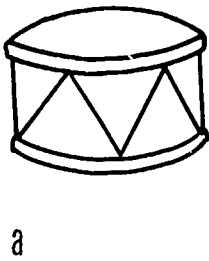
1



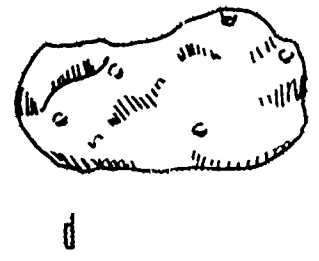
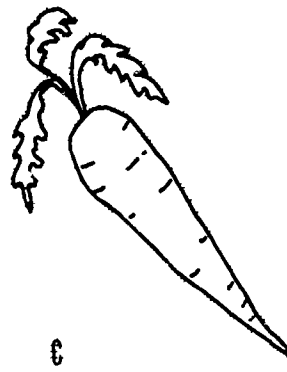
2



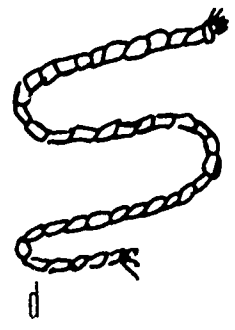
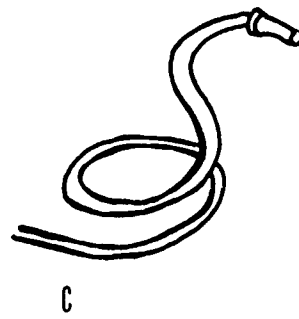
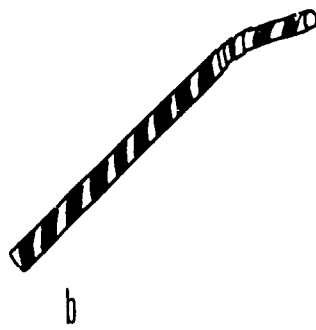
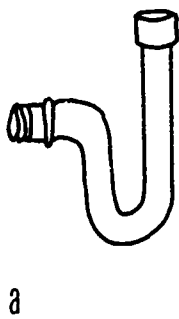
3



4

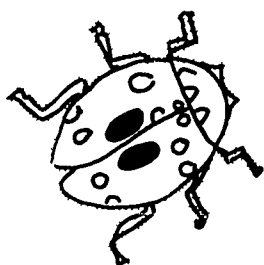


5

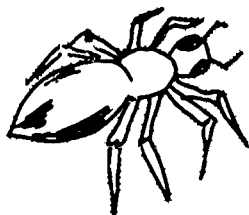


PICTURE EXCLUSION

6



a



b

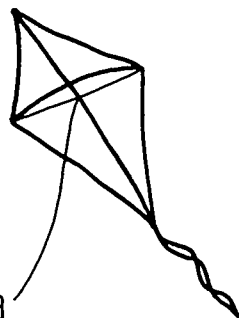


c



d

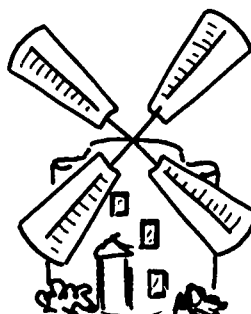
7



a



b

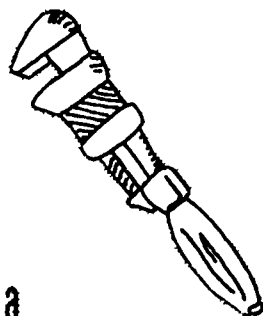


c

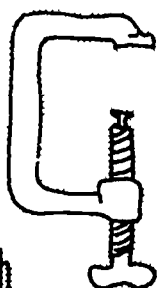


d

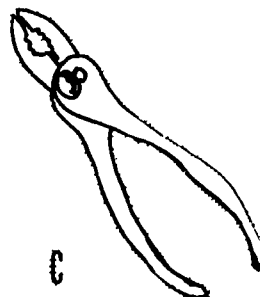
8



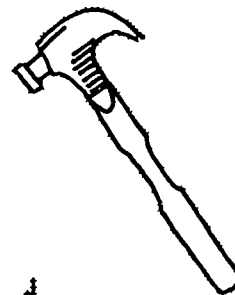
a



b



c

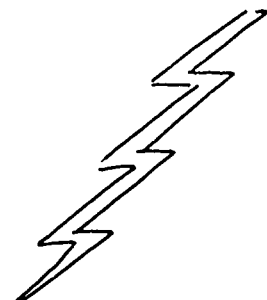


d

9



a



b

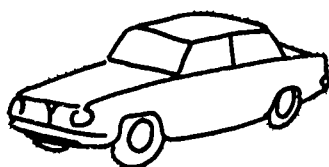


c

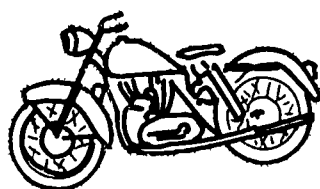


d

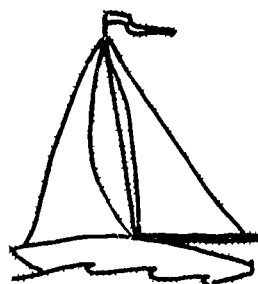
10



a



b



c

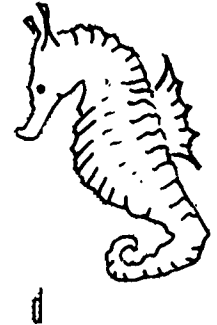
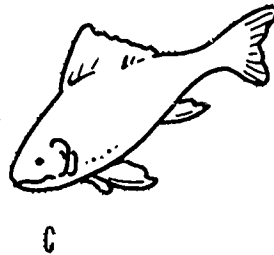
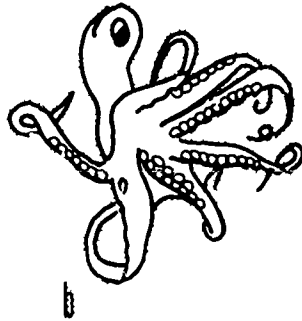


d

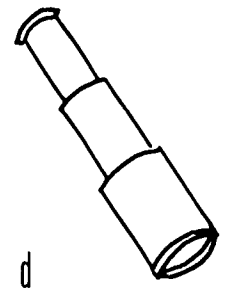
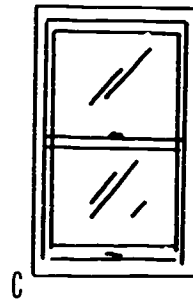
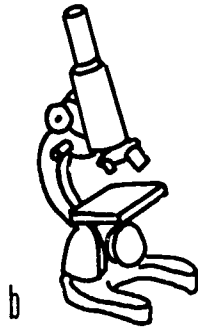
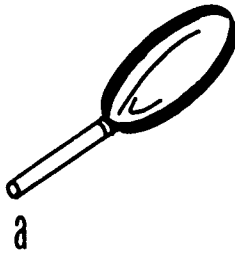
PICTURE EXCLUSION

6"

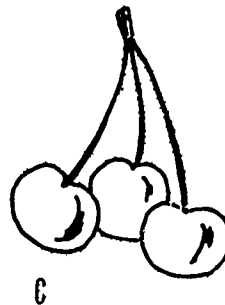
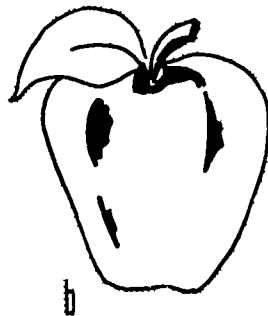
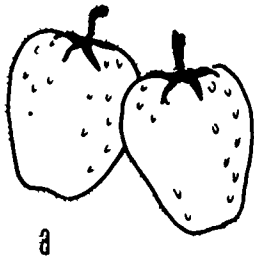
11



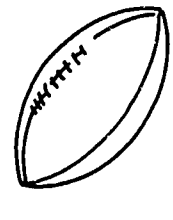
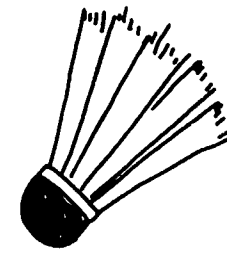
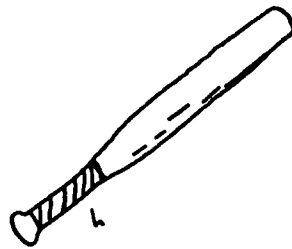
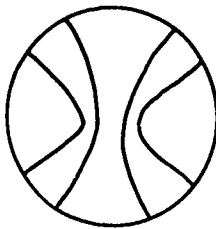
12



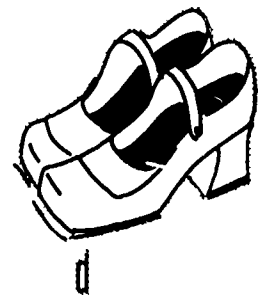
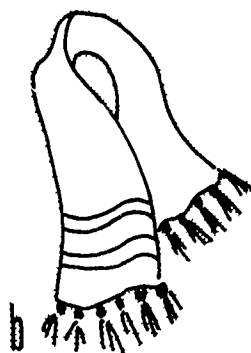
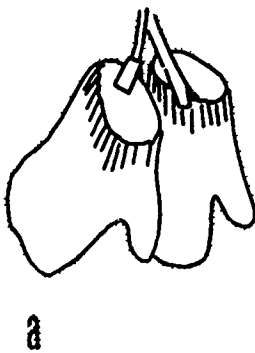
13



14

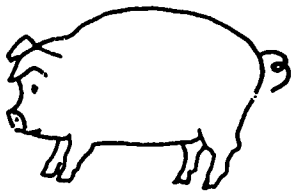


15



PICTURE EXCLUSION

16



a



b



c



d

17



a



b

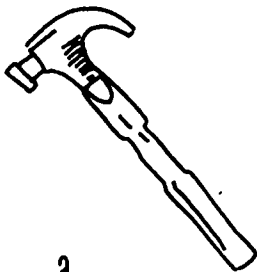


c

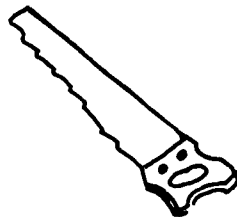


d

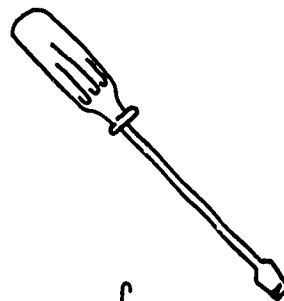
18



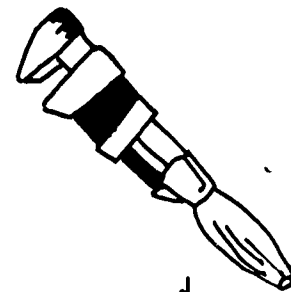
a



b

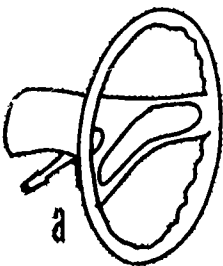


c



d

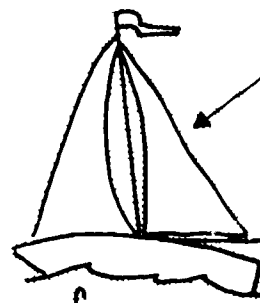
19



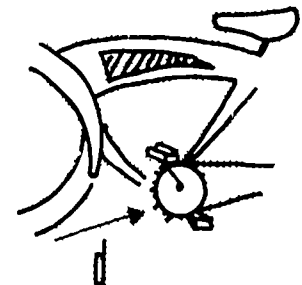
a



b

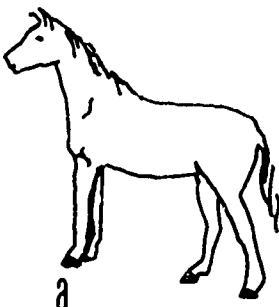


c



d

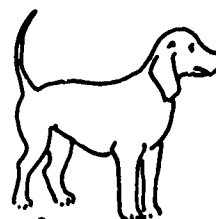
20



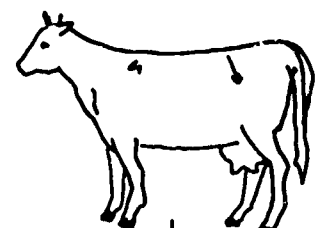
a



b



c



d

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

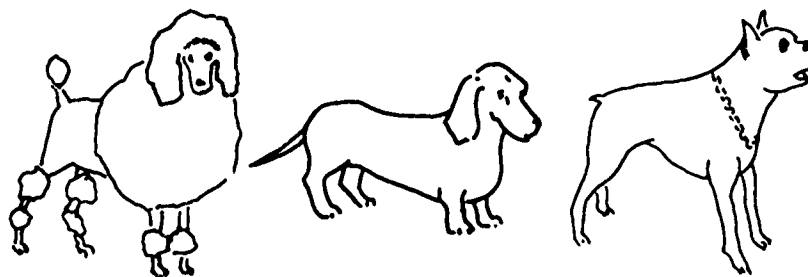
PICTURE GROUP NAME SELECTION

DIRECTIONS

In each question there are pictures of 3 objects or things that all belong in a group for some reason. For each question there are 3 possible names for the group of pictures. You must decide which name best describes the group. Then, on your answer sheet, mark the answer box with the same letter as the answer you have chosen.

Now look at an example:

I.



are all:

- A. animals
- B. brown animals
- C. dogs

Look at the pictures carefully and choose the best name for the group.

You should have chosen C. dogs as the best name. All of the pictures show animals, and they could all be brown animals, but dogs is the best answer. It is the most specific, correct answer.

The row of answer boxes for this example has been marked correctly below:

I. ☒ ☐ ☐ ☐ ☐

There are 20 groups of pictures. Be sure to pick the best name for each one.

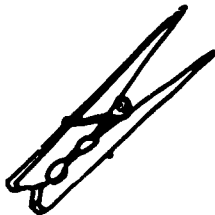
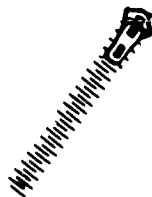
If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

PICTURE GROUP NAME SELECTION

Pick the best name for each group.

1



are all:

- A. decorations
- B. fasteners
- C. parts of clothing

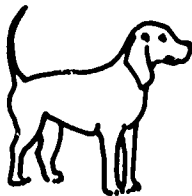
2



are all:

- A. forms of water
- B. kinds of weather
- C. seasons

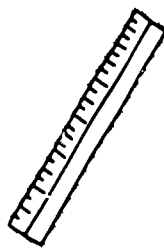
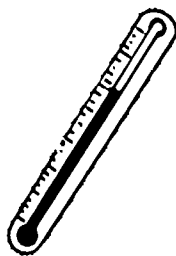
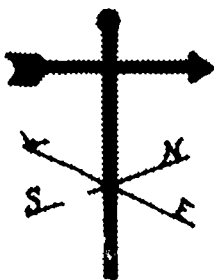
3



are all:

- A. animals
- B. mammals
- C. wild animals

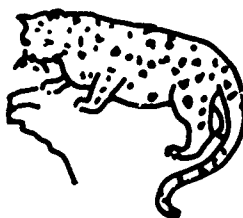
4



are all:

- A. tools
- B. measuring instruments
- C. measuring instruments for direction

5



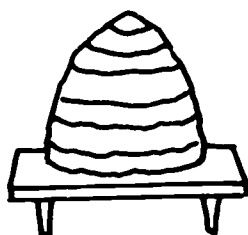
are all:

- A. cave-dwelling animals
- B. rare animals
- C. fur-bearing animals

GO ON TO THE NEXT PAGE

Pick the best name for each group.

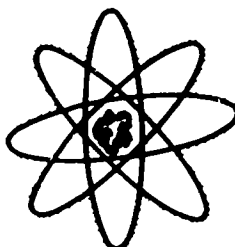
6



are all:

- A. shelters
- B. coverings
- C. homes

7



are all:

- A. liquids
- B. gases
- C. power sources

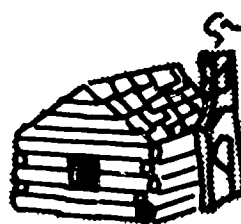
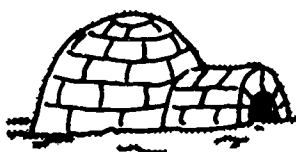
8



are all:

- A. satellites
- B. stars
- C. planets

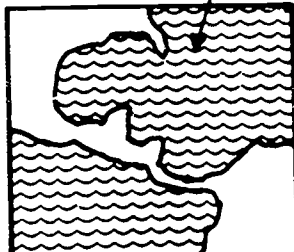
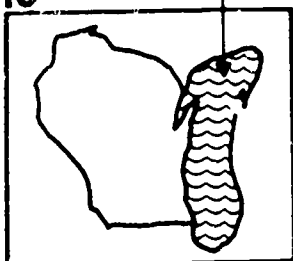
9



are all:

- A. tents
- B. dwellings
- C. shacks

10



are all:

- A. places where fish live
- B. man-made bodies of water
- C. sources of drinking water

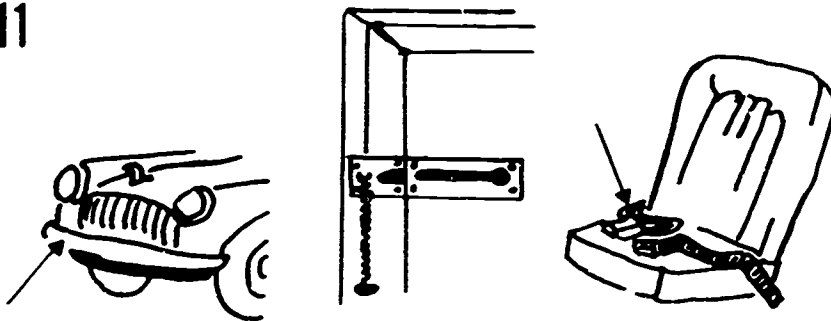
GO ON TO THE NEXT PAGE

PICTURE CROUP NAME SELECTION

70

Pick the best name for each group.

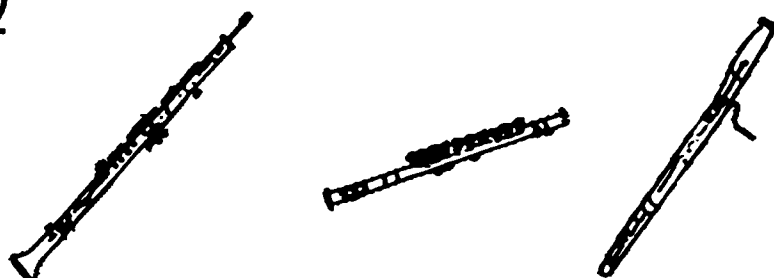
11



are all:

- A. fastening devices
- B. safety devices
- C. mechanical devices

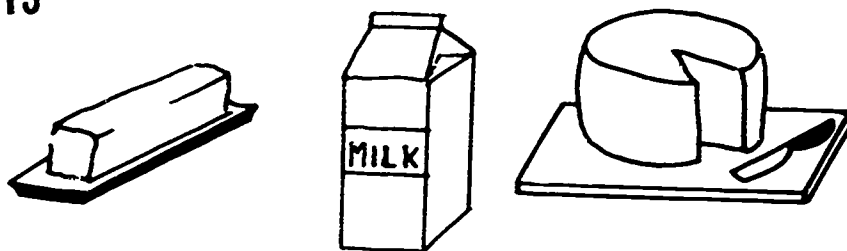
12



are all:

- A. woodwind instruments
- B. brass instruments
- C. musical instruments

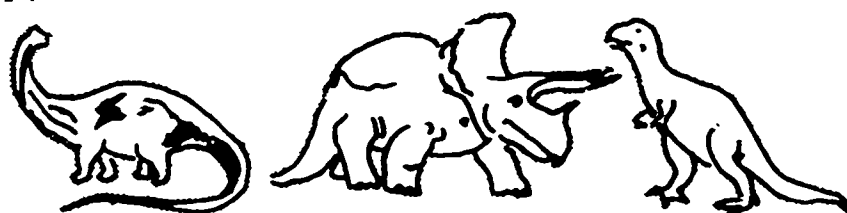
13



are all:

- A. dairy products
- B. animal products
- C. foods

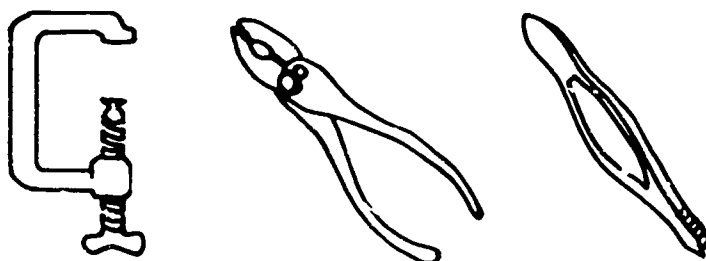
14



are all:

- A. wild animals
- B. reptiles
- C. prehistoric animals

15



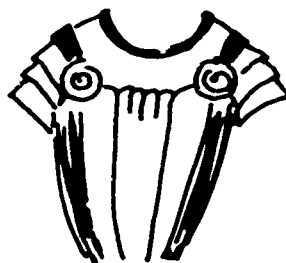
are all:

- A. wrenches
- B. gripping tools
- C. tools

GO ON TO THE NEXT PAGE

Pick the best name for each group.

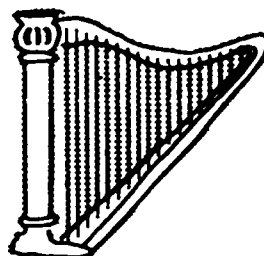
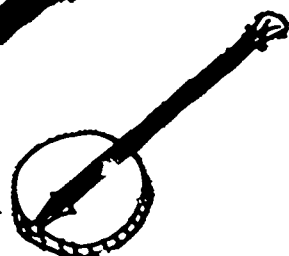
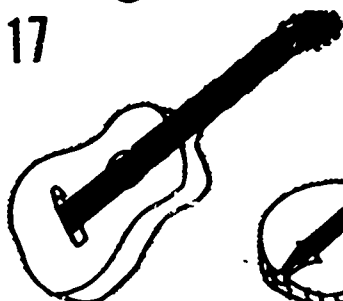
16



are all:

- A. clothing
- B. weapons
- C. armor

17



are all:

- A. string instruments
- B. brass instruments
- C. musical instruments

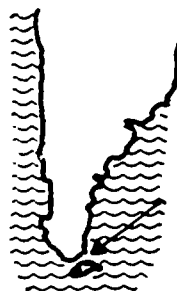
18



are all:

- A. grains
- B. grasses
- C. foods

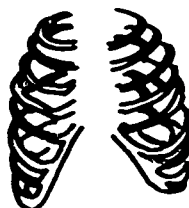
19



are all:

- A. bodies of water
- B. waterways
- C. parts of oceans

20



are all:

- A. parts of human skeleton
- B. parts of human body
- C. bones

STOP

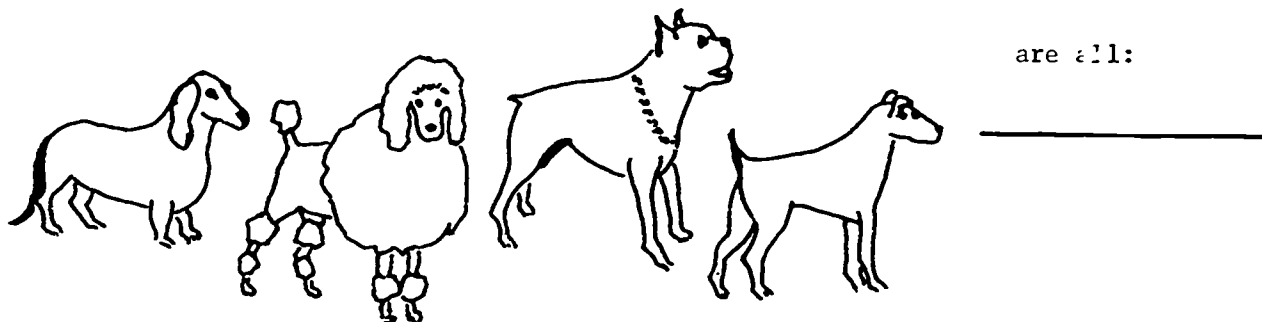
IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

PICTURE GROUP NAMING

DIRECTIONS

In each question there are 4 pictures of objects which are alike in some way. In the blank space in your booklet you are to print (or write clearly) the best general name for the group of objects. Be as specific as possible.

Here is an example:



Dachshund, Poodle, Boxer and Terrier are all animals, but the best (most specific) name for the group is dogs.

There are 20 questions. Be sure to answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO.

PICTURE GROUP NAMING

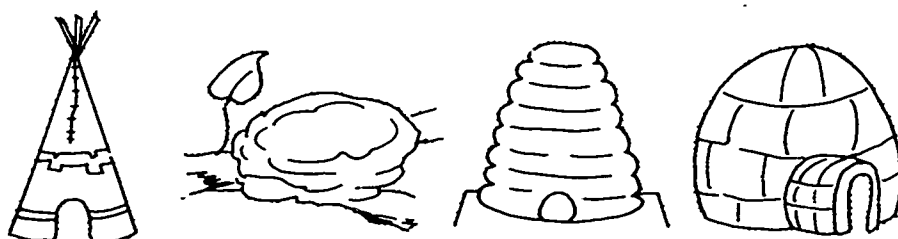
73

1.



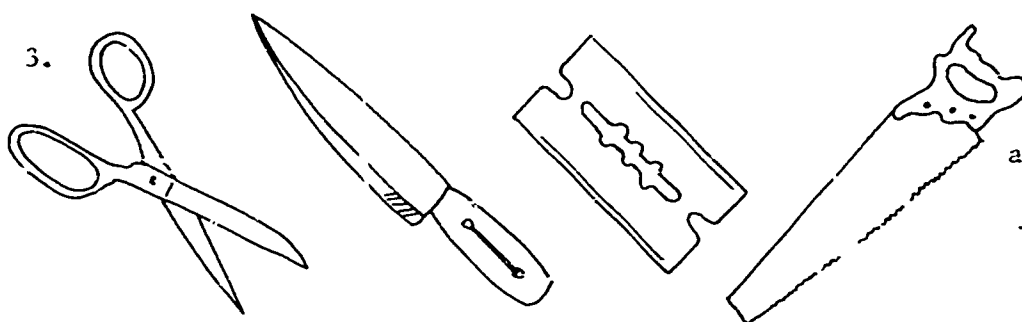
are all:

2.



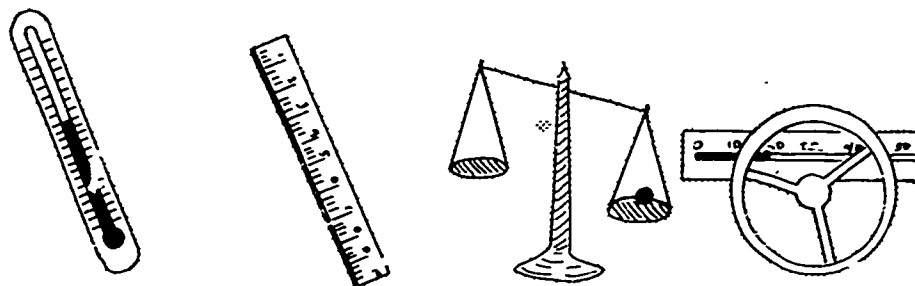
are all:

3.



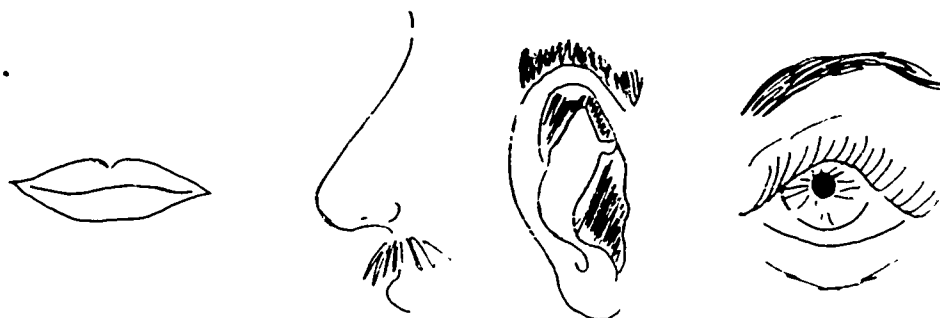
are all:

4.



are all:

5.

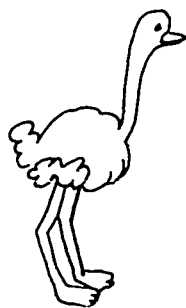
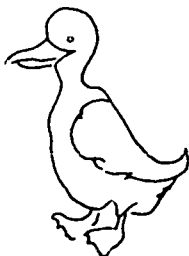
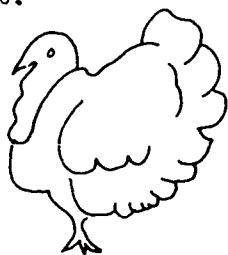


are all:

GO ON TO THE NEXT PAGE

PICTURE GROUP NAMING

6.



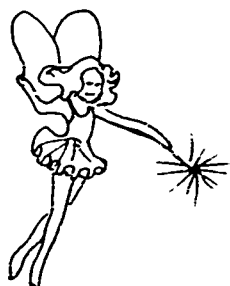
are all:

7.



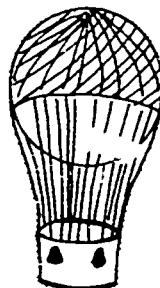
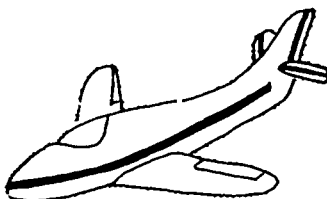
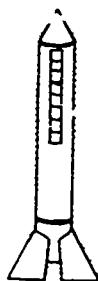
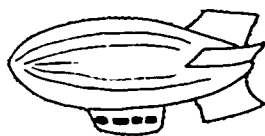
are all:

8.



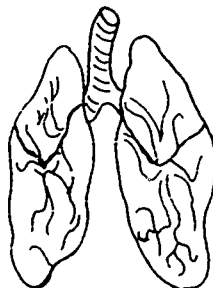
are all:

9.



are all:

10.

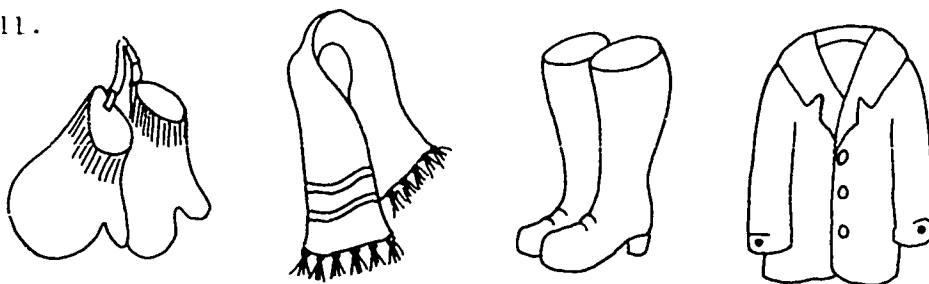


are all:

GO ON TO THE NEXT PAGE

PICTURE GROUP NAMING

11.



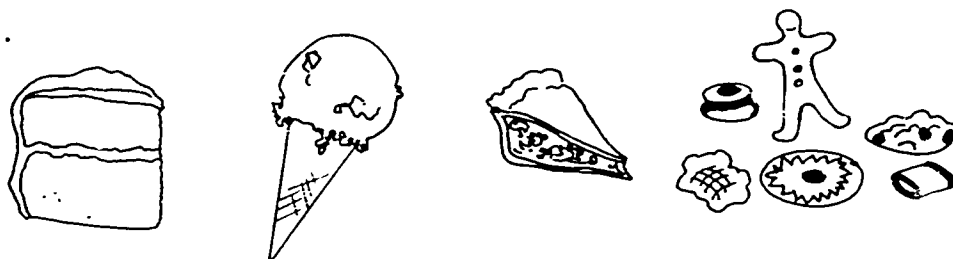
are all:

12.



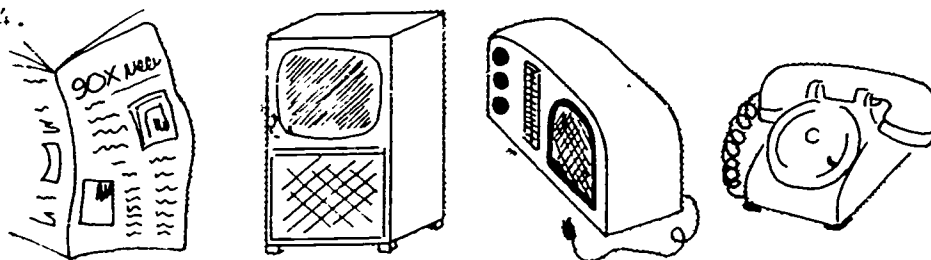
are all:

13.



are all:

14.



are all:

15.

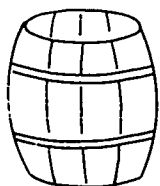


are all:

GO ON TO THE NEXT PAGE

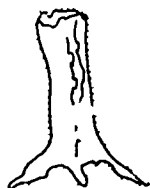
PICTURE GROUP NAMING

16.



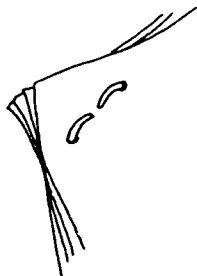
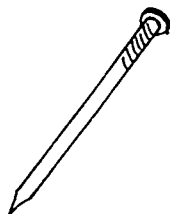
are all:

17.



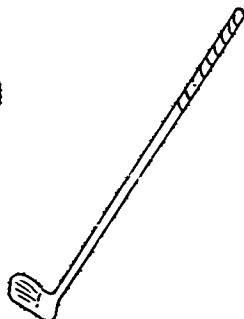
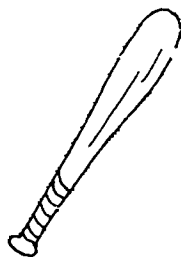
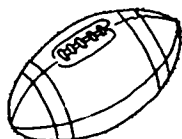
are all:

18.



are all:

19.



are all:

20.



are all:

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

REMEMBERING CLASSES: MEMBERS

DIRECTIONS

We sometimes think of objects that are alike in some way as all belonging to a "class" of things. For instance, chair, desk, and bed are all in the "class" FURNITURE. In this test we would like to see how well you can remember the "classes" of some objects. First you will have 1 1/2 minutes to study a page of groups of things. On this study page there will be 10 groups of things listed. Each group forms a class--but you will not be told the name of the class. For example, one group of things may be:

A. chair
desk
bed

You will not be told that they are in the class FURNITURE. You will have to discover that for yourself--and you must remember it!

Then, for the test, there is a page of 20 questions. On this page you will find pairs of words which are questions about each class of things on the study page. For example, two pairs of words that might be questions about CHAIR-DESK-BED are:

I. chair
sofa

II. chair
door

For each of these pairs you must decide if the 2 things belong to the SAME CLASS of things as the class you are supposed to remember. You cannot look back at the study page. You will have to try to remember the class of things that you see.

One word will always be in the class of things listed on the study page and in each of the 2 pairs of words that are questions about its class. In our example, CHAIR is in the study list: I. chair
desk
bed

CHAIR is also in both of the two questions:

I.	chair	II.	chair
	sofa		door

Sofa and door were not in the study group of three things.

Look at the first question. I. chair
 sofa

Does this pair of things belong to the same class of things as the class you remember from the study page?

Yes, both chair and sofa belong the the class FURNITURE. The answer for I. chair, is YES. The row of answer boxes for this question would

be marked like this:

I. **11** 0 0 7

T is for true, or "YES," answers.

Now look at the second question. II. chair
door

Does this pair of things belong to the same class of things as the class you remember from the study page?

No, DOOR does not belong to the class FURNITURE. Chair and door are alike in that both are found in a house, but they are not both in the same class that you studied. The answer box for this question would look like this:

II. $\int_A^B f(x) dx = \int_A^C f(x) dx + \int_C^B f(x) dx$

F is for false, or "NO," answers.

On the study page you will see 10 groups of words. Look at these and study them very carefully so that you can remember the classes of things you have seen.

After 1 1/2 minutes I will tell you to turn the page, and you will find a page of 20 questions made up of 2 words each. Look at each question and try to remember whether it belongs to the same class as one that you saw on the study page. The answer for any question could be yes or no. If you think the class is the same as one you studied and remember, mark the T-box. If it is not the same, mark the F-box.

T means YES

F means NO

You will do this for all 20 of the questions.

You must remember 10 classes of things from the 1 1/2 minutes of study time you will have. Once you turn the page you cannot look back at it.

The two things for each of the questions will be alike in some way. You must decide if they are alike in the same way as one of the groups that you studied. That is, do they belong to the same class?

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

REMEMBERING CLASSES: MEMBERS

Study Page

A. daisy
rose
poppy

F. ounce
pound
gram

B. iron
gold
nickel

G. pine
oak
elm

C. coffee
tea
milk

H. shoelace
lasso
rope

D. sour
sweet
bitter

I. potato
bean
pea

E. morning
afternoon
evening

J. cat
horse
dog

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

REMEMBERING CLASSES: MEMBERS

Test Page

If the pair of words belongs to a class you studied, mark the T box.

If the pair of words does NOT belong to a class you studied, mark the F box.

- | | |
|-------------------------|------------------------|
| 1. pound
ton | 11. pound
beat |
| 2. daisy
pansy | 12. potato
carrot |
| 3. dog
collar | 13. lasso
saddle |
| 4. oak
spruce | 14. dog
bark |
| 5. potato
corn | 15. daisy
grass |
| 6. lasso
string | 16. milk
ice cream |
| 7. morning
breakfast | 17. sweet
salty |
| 8. milk
cow | 18. nickel
dime |
| 9. oak
birch | 19. morning
sunrise |
| 10. nickel
lead | 20. sweet
candy |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

REMEMBERING CLASSES: NAMES

DIRECTIONS

We often think of things as belonging to a "class." For example, CAT and DOG belong to the class ANIMALS. This test is about "classes." In the first part of the test you will have 1 1/2 minutes to study a page with 10 groups of 4 words each. In each group the 4 things all belong to one class. You will not be told the name of the class. You must discover it for yourself.

Here is an example of a group of 4 things like the groups you will see on the study page:

Example -- DOG
CAT
HORSE
RABBIT

What "class" do these 4 things belong to? Yes, they all belong to the class ANIMALS. You must remember the name of the class (ANIMALS) because after 1 1/2 minutes you will turn to another page, and you will see 20 names of classes. Only some of them will be the names of classes that you are to remember from the study page.

In our example, if you saw the class name I. ANIMALS on the test page, you would mark the T-box for true, or "YES," like this:

I. ☒ T ☐ F ☐ U ☐ N

because you remember that DOG-CAT-HORSE-RABBIT are in the same class, ANIMALS.

If you saw the class name II. FRUITS on the test page, you would mark the F-box for false, or "NO," like this:

II. ☐ T ☒ F ☐ U ☐ N

because you did not see a group of things that belong to the class FRUITS.

Look at each class name and try to remember if it names a class of things that you studied on the study page. Any name can be yes or no. If you think the name is for a class that you studied, mark the T-box. If it is not, mark the F-box.

T means YES

F means NO

You are to remember the names for 10 classes of things from the study page. After 1 1/2 minutes you must turn the study page and then you may not look back at it.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

REMEMBERING CLASSES: NAMES

Study Page

A. apple
orange
banana
peach

F. chocolate
mint
gumdrop
lollipop

B. cottage
cabin
house
palace

G. oak
maple
pine
elm

C. hammer
pliers
saw
screwdriver

H. attic
kitchen
living room
cellar

D. tuna
herrings
trout
bass

I. hide-and-seek
basketball
baseball
tag

E. red
blue
green
yellow

J. headlight
sun
lantern
candle

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

REMEMBERING CLASSES: NAMES

Test Page

If the class name is one you studied, mark the T box.

If the class name is not one you studied, mark the F box.

- | | |
|---------------|---------------|
| 1. vegetables | 11. colors |
| 2. fruits | 12. lights |
| 3. homes | 13. nuts |
| 4. insects | 14. birds |
| 5. tools | 15. flowers |
| 6. fish | 16. candies |
| 7. seasons | 17. games |
| 8. numbers | 18. toys |
| 9. rooms | 19. trees |
| 10. dances | 20. furniture |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

SAME - OPPOSITE

DIRECTIONS

There are 2 words in each question. For some of the questions the two words mean the same or about the same thing. For other questions the two words are opposite or about the opposite in meaning. You are to decide if the 2 words in each question mean the same thing or are opposite in meaning. Then,

Mark the T-box for Same,

Mark the F-box for Opposite.

Be sure to match the number of the question with the number of the row of answer boxes.

Let's look at two examples:

I. big - large

Look at the two words. Do they mean the same or the opposite? Yes, they mean about the same. The answer box below has been marked correctly.

I. ☒ T ☐ F

Example II. hot - cold

Do these words mean the same or the opposite? Yes, they mean about the opposite. The answer box below has been marked correctly.

II. ☐ T ☒ F

There are 20 questions on the test. Be sure to answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

SAME - OPPOSITE

Mark the T-box for SAME
Mark the F-box for OPPOSITE

1. glee joy
2. dull sharp
3. apiece each
4. peak valley
5. offer refuse
6. brief long
7. survive remain
8. flood drain
9. forbid allow
10. order arrange
11. trench ditch
12. single numerous
13. inquire ask
14. speckled spotted
15. expand compress
16. brace support
17. unseen visible
18. captive free
19. recipe formula
20. hastily leisurely

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

SCRAMBLED SENTENCES

DIRECTIONS

For each question there is a group of words that are scrambled or in a mixed up order. There are two steps to this test.

Step 1: You are to rearrange the words in your head to make a sentence.

Step 2: Then decide whether the sentence you made out of the scrambled words is true or false.

On the answer sheet, find the answer boxes numbered the same as the question you are working on. You will see a T and F above the first two boxes.

If the sentence is true, mark the T box.

If the sentence is false, mark the F box.

Here are two examples:

I. above grow ground flowers

The sentence above reads Flowers grow above ground when the words are unscrambled. Is this a true statement? Yes, this is true. The T or true box is marked correctly:

I. ☒ T ☐ F

II. trees in fish live

When we unscramble these words our sentence reads: Fish live in trees. Is this a true sentence? No, we know it is false because fish do not live in trees. The F or false box is marked correctly:

II. ☐ T ☒ F

There are 20 questions. They are about social studies, science, language arts, and mathematics. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

SCRAMBLED SENTENCES

In your head, unscramble the words below to make a sentence.
If the sentence is true, mark the T-box on your answer sheet.
If the sentence is false, mark the F-box on your answer sheet.

Social Studies

1. straight are waterways all
2. sky an flies ground in airplane the travels and the on
3. that south all mountain a begin rivers in flow
4. region near cold the tropical being equator the makes
5. Australia comes summer the during in Christmas

Science

6. climates in cold occur glaciers
7. to lungs use blooded mammals and warm are breathe
8. vegetables kinds invertebrates are of
9. neither mammals whales are nor crocodiles
10. both exist things solids as some liquids and

GO ON TO THE NEXT PAGE

SCRAMBLED SENTENCES

In your head, unscramble the words below to make a sentence.
If the sentence is true, mark the T-box on your answer sheet.
If the sentence is false, mark the F-box on your answer sheet.

Language Arts

11. are nouns always contractions
12. mark of one punctuation is period a type
13. mark ends in statement a question a
14. both verbs adverbs modify and adjectives
15. an form is word a shortened abbreviation a of

Mathematics

16. must curved all intersect lines
17. be a holder letter place can a
18. quotient the of divisor product a and the is dividend
19. a multiplication is sign in times used
20. three plane a dimensions has

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

SEEING TRENDS

In which blank does the word on the right belong?

1. a on coat ready (ten)
A B C
2. hurt joke dear barn (find)
A B C
3. arm lean ocean extra (car)
A B C
4. mud jar day air (get)
A B C
5. able into ouch ugly (even)
A B C
6. broke name pretty eat (her)
A B C
7. legal not an I (such)
A B C
8. also edge girl inch (coal)
A B C
9. unless off item angry (eight)
A B C
10. blue did crowa bit (clean)
A B C

GO ON TO THE NEXT PAGE

SEEING TRENDS

In which blank does the word on the right belong?

11. up ice elf ask (own)
 A B C
12. sweet under visit world (train)
 A B C
13. bell hand keep name (else)
 A B C
14. built daisy happy judge (floor)
 A B C
15. luck king just hold (item)
 A B C
16. cake fish iron offer (lamp)
 A B C
17. us ran dance return (live)
 A B C
18. that sang real poor (quit)
 A B C
19. away ever once uncle (into)
 A B C
20. pie mop apart pile (spool)
 A B C

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

SENSITIVITY TO ORDER

DIRECTIONS

There are four (4) words together in a line for each question. The spaces at the beginning of the line, between each word and at the end of the line have been lettered A,B,C,D, and E. One other word is given on the right. You are to decide in which blank the word on the right belongs--blank A,B,C,D, or E. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. Fill in the answer box on the answer sheet that has the same number as the blank you picked.

Here is an example:

1. Monday Wednesday Thursday Friday (Tuesday) 3 1 2 2 2
 A B C D E

1.

Tuesday is the day after Monday and the day before Wednesday so it belongs in blank B. The B-box has been marked correctly above.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

SENTENCE ORDER

DIRECTIONS

There are 20 groups of three sentences each. When the three sentences in each group are in the proper order they tell about something that happened. The three sentences of each group are not given in the right order. You must decide how to arrange the three sentences so that they are in the right order. Then you will be asked two questions for each group of 3 sentences:

1. Which sentence should come first?
2. Which sentence should come last?

Let's look at an example.

I. Which sentence below should come first?

I. 3 1 2 a r

II. Which sentence below should come last?

II. 2 3 1 a r

- A. I bought some .
- B. Mother sent me to the store.
- C. I ate an apple on the way home.

What is the best way to arrange these sentences to make sense?

This is the best way:

- B. Mother sent me to the store.
- A. I bought some apples.
- C. I ate an apple on the way home.

The answer boxes above have been marked correctly for the two questions about this group of sentences.

Do not make any marks in your test booklet. Rearrange the sentences in your mind and then answer the two questions about each group of sentences. There are 40 questions in all. Be sure to answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

SENTENCE ORDER

1. Which sentence below should come first?
2. Which sentence below should come last?
 - A. In a short time the fire was put out.
 - B. Mother called the fire department.
 - C. I opened the basement door, and smoke poured out.
3. Which sentence below should come first?
4. Which sentence below should come last?
 - A. We wrote a story about our trip.
 - B. Our class went on a bus to visit a bakery.
 - C. We watched the bakers remove cakes from the oven.
5. Which sentence below should come first?
6. Which sentence below should come last?
 - A. She worked hard all day.
 - B. She arrived at her office.
 - C. She ate dinner at home in the evening.
7. Which sentence below should come first?
8. Which sentence below should come last?
 - A. We each caught five fish.
 - B. We drove to the lake in the mountains.
 - C. We packed our fishing poles for our trip.
9. Which sentence below should come first?
10. Which sentence below should come last?
 - A. On the way home we laughed about the monkeys.
 - B. We went to the zoo last week.
 - C. The keeper told us about the animals.

GO ON TO THE NEXT PAGE

SENTENCE ORDER

11. Which sentence below should come first?

12. Which sentence below should come last?

- A. Jane went to the grocery store.
- B. The clerk gave Jane forty cents in change.
- C. Jane paid the clerk a dollar.

13. Which sentence below should come first?

14. Which sentence below should come last?

- A. We ate our orange slices.
- B. Jim gave one piece to each of us.
- C. Jim cut an orange into four pieces.

15. Which sentence below should come first?

16. Which sentence below should come last?

- A. The teacher drew a circle.
- B. Sue asked her teacher to draw a circle.
- C. Sue made a picture out of the teacher's circle.

17. Which sentence below should come first?

18. Which sentence below should come last?

- A. I had to pay a fine.
- B. I did not finish the book in time.
- C. I borrowed a book from the library.

19. Which sentence below should come first?

20. Which sentence below should come last?

- A. We sold the cookies in front of a store.
- B. Our club baked lots of cookies.
- C. We made ten dollars.

GO ON TO THE NEXT PAGE

SENTENCE ORDER

21. Which sentence below should come first?
22. Which sentence below should come last?
- A. My aunt gave us each a present when we left to go home.
 - B. We took the train to visit my aunt.
 - C. We stayed at my aunt's home for the weekend.
23. Which sentence below should come first?
24. Which sentence below should come last?
- A. My friends and I went to the beach.
 - B. Everyone peeled but me.
 - C. We all got sunburned.
25. Which sentence below should come first?
26. Which sentence below should come last?
- A. The story was printed in the paper.
 - B. Jim sent the story to the school newspaper.
 - C. Jim wrote a story in school.
27. Which sentence below should come first?
28. Which sentence below should come last?
- A. The boys sailed their boats in the pond at the park.
 - B. Tom and Steve made paper boats.
 - C. The two boys took the boats to the park.
29. Which sentence below should come first?
30. Which sentence below should come last?
- A. John hurt his foot.
 - B. John fell on the ice.
 - C. John borrowed some ice skates.

GO ON TO THE NEXT PAGE

SENTENCE ORDER

31. Which sentence below should come first?

32. Which sentence below should come last?

- A. The doorbell rang.
- B. My uncle came inside.
- C. Father went to open the door.

33. Which sentence below should come first?

34. Which sentence below should come last?

- A. The stewardess told us to fasten our seat belts.
- B. My sister and I climbed aboard the jet.
- C. We took off.

35. Which sentence below should come first?

36. Which sentence below should come last?

- A. Columbus reached the Americas in October.
- B. Columbus named the natives "Indians."
- C. Columbus left Spain for the Orient.

37. Which sentence below should come first?

38. Which sentence below should come last?

- A. The medicine man grinds stones to get colored sand.
- B. The sand paintings are destroyed after the ceremony.
- C. The medicine man uses the colored sand to make sand paintings for special ceremonies.

39. Which sentence below should come first?

40. Which sentence below should come last?

- A. The salmon swims upstream to lay its eggs.
- B. The salmon spends its adult life in the sea.
- C. Pacific salmon die soon after laying their eggs.

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

VERBAL ANALOGIES

DIRECTIONS

We sometimes say that two words are "related" when there is some kind of connection between them. For example, they may be alike or different in some way. In each question below, there are three words given in capital letters. Look at the first two words and figure out how they are related. Then, choose the one answer that is related to the third word in the same way that the second word is related to the first. On the answer sheet mark the box with the letter of your answer.

Here is an example:

- I. HAND is to MAN as PAW is to
- | | |
|---------|---|
| A. boy | I. <input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D |
| B. dog | |
| C. fish | |
| D. bird | |

Look at the first two words. How are they related? HAND is a part of a MAN's body. Which answer is related to PAW in the same way that MAN is related to HAND? The correct answer is DOG. PAW is a part of a DOG's body. The letter is B. The correct box has been marked above.

Remember, words may be related in many different ways. Be sure to look at each question carefully.

There are 24 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

Items adapted from: Edward C. Gouber. Analogy Questions.
 Copyright © 1967 by the Arco Publishing Co., Inc.
 Reproduced with permission of the publisher.

VERBAL ANALOGIES

1. SHIP is to DOCK as AUTOMOBILE is to
A. garage
B. road
C. fender
D. mechanic
2. LETTERS is to MAILBOX as MONEY is to
A. bank
B. spend
C. coins
D. wealth
3. PIG is to PORK as STEER is to
A. car
B. ranch
C. beef
D. cowboy
4. TASTE is to TONGUE as TOUCH is to
A. finger
B. eye
C. feeling
D. borrow
5. NOTHING is to EVERYTHING as WHISPER is to
A. mystery
B. yell
C. voice
D. ghost
6. WOOD is to DECAY as IRON is to
A. dampness
B. rust
C. steel
D. ore
7. NUT is to SHELL as PEA is to
A. shooter
B. soup
C. green
D. pod
8. MELON is to RIND as ANIMAL is to
A. skin
B. horn
C. fox
D. cage

GO ON TO THE NEXT PAGE

VERBAL ANALOGIES

9. PARACHUTE is to PLANE as LIFE PRESERVER is to
A. fish
B. boat
C. water
D. chest
10. HAND is to ELBOW as FOOT is to
A. muscle
B. knee
C. leg
D. toe
11. NECKLACE is to BEAD as CHAIN is to
A. ball
B. iron
C. link
D. strength
12. SHOWER is to CLOUDBURST as BRLEEZE is to
A. rain
B. sunshine
C. climate
D. tornado
13. SORROW is to DEATH as HAPPINESS is to
A. accident
B. smiling
C. crying
D. birth
14. COMMON is to STEEL as RARE is to
A. steak
B. crowd
C. humor
D. diamond
15. THROW is to LALL as CHEW is to
A. teeth
B. food
C. nose
D. milk
16. FLY is to SPIDER as MOUSE is to
A. cat
B. rat
C. rodent
D. animal

GO ON TO THE NEXT PAGE

VERBAL ANALOGIES

17. SEAL is to FISH as BIRD is to
A. wing
B. feather
C. worm
D. snail
18. SEA is to COAST as RIVER is to
A. inlet
B. delta
C. stream
D. bank
19. TUESDAY is to THURSDAY as SATURDAY is to
A. Sunday
B. Monday
C. Wednesday
D. Friday
20. HEAR is to SOUND as SEE is to
A. move
B. taste
C. scene
D. eye
21. MOTORCYCLE is to BICYCLE as AUTOMOBILE is to
A. bus
B. airplane
C. transportation
D. wagon
22. BUD is to BLOSSOM as BLOSSOM is to
A. fruit
B. leaf
C. vine
D. flower
23. ACORN is to OAK as EGG is to
A. yolk
B. crack
C. bird
D. shell
24. VINE is to WATERMELON as TREE is to
A. limb
B. leaf
C. apple
D. earth

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON
THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

VERBAL CLASSIFICATION

DIRECTIONS

Each question has four (4) words in the left column that belong together. They form a class based upon meaning. There are three (3) words on the right that are possible answers. You are to pick the one answer that belongs with the four words on the left. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. You are to fill in the answer box on the answer sheet that has the same letter as the answer you picked.

Here is an example:

I. steak	A. egg	1. <input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
milk	B. knife	
orange	C. dish	
onion		

How are the four words on the left alike? They are all foods. Which one word on the right is like them? B. knife and C. dish are not foods. A. egg is a food. Its letter is A. The A-box is marked correctly above.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

VERBAL CLASSIFICATION

Which word on the right belongs with the group on the left?

- | | |
|---|--|
| 1. dirt
gravel
macadam
asphalt | A. steel
B. wood
C. concrete |
| 2. ice
water
sleet
rain | A. storm
B. snow
C. wind |
| 3. stream
lake
creek
river | A. bank
B. brook
C. ocean |
| 4. ant
bee
tick
beetle | A. flea
B. spider
C. worm |
| 5. puppy
colt
chick
lamb | A. hen
B. sheep
C. kitten |
| 6. cloves
garlic
cinnamon
salt | A. radish
B. pepper
C. flour |
| 7. crack
shatter
tear
rip | A. open
B. mend
C. break |
| 8. basketball
volleyball
baseball
football | A. ice hockey
B. archery
C. soccer |
| 9. boulder
gravel
pebble
rock | A. stone
B. lake
C. desert |
| 10. paste
sew
build
cement | A. cut
B. house
C. tape |

VERBAL CLASSIFICATION

Which word on the right belongs with the group on the left?

- | | |
|--|---|
| 11. alone
only
sole
unique | A. person
B. both
C. single |
| 12. noun
verb
conjunction
adjective | A. paragraph
B. adverb
C. punctuation |
| 13. bark
quack
peep
roar | A. honk
B. crash
C. ring |
| 14. month
year
minute
week | A. degree
B. third
C. second |
| 15. over
again
another
duplicate | A. start
B. repeat
C. end |
| 16. hunt
look
search
scout | A. seek
B. find
C. view |
| 17. lantern
candle
sun
light bulb | A. flashlight
B. thunder
C. clouds |
| 18. mittens
muffler
boots
overcoat | A. blouse
B. tennis shoes
C. sweater |
| 19. poppy
pansy
lily
lotus | A. pine
B. orchid
C. bamboo |
| 20. spill
drip
seep
overflow | A. pour
B. leak
C. crack |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY. DO NOT
WORK ON ANY OTHER TEST IN THE BOOKLET.

VERBAL EXCLUSION

DIRECTIONS

There are four (4) words for each question. Three (3) of these words belong together. They form a class based upon meaning. One word does not belong to this class. You are to pick the word that does not belong. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. You are to fill in the answer box on the answer sheet that has the same letter as the answer you picked.

Here is an example:

I. A. Sunday B. Thursday C. Yesterday D. Wednesday

3 0 1 5

Three of these belong to a class. Which word does not belong?

A. Sunday, B. Thursday, and D. Wednesday are all names of the days of the week. C. Yesterday is not. Its letter is C. The C-box is marked correctly above.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

VERBAL EXCLUSION

Which word does not belong?

1. A. ounce B. pound C. ton D. acre
2. A. beef B. heart C. stomach D. liver
3. A. flute B. harmonica C. sing D. bugle
4. A. tennis B. dance C. golf D. badminton
5. A. cement B. water C. vinegar D. gasoline
6. A. strawberry B. plum C. peach D. apple
7. A. blizzard B. tornado C. hurricane D. earthquake
8. A. couple B. several C. both D. pair
9. A. tape B. sew C. cut D. build
10. A. puppy B. chick C. lamb D. hen

GO ON TO THE NEXT PAGE

VERBAL EXCLUSION

Which word does not belong?

11. A. almond B. cashew C. fudge D. pecan
12. A. bee B. spider C. moth D. wasp
13. A. again B. over C. start D. repeat
14. A. drip B. leak C. spill D. pour
15. A. garage B. wrench C. pliers D. screwdriver
16. A. on B. and C. over D. to
17. A. pliers B. shears C. scissors D. nutcracker
18. A. crack B. mend C. break D. shatter
19. A. find B. hunt C. look D. search
20. A. lake B. street C. canyon D. river

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

WORD EXCLUSION

DIRECTIONS

There are four (4) words for each question. Three (3) of these words belong together. They form a class based upon the structure or form of the words. The meaning of the words is not important. One word does not belong to this class. You are to pick the word that does not belong. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. You are to fill in the answer box on the answer sheet that has the same letter as the answer you picked.

Here is an example:

I. A. thought B. tot C. twirl D. that

I.

T	F
A	B
C	D

Three of these belong to a class. Which word does not belong?

A. thought, B. tot, and D. that all begin and end with the letter t. C. twirl does not. Its letter is C. The C-box is marked correctly above.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

WORD EXCLUSION

Which word does not belong?

- | | | | | |
|-----|-------------|-------------|-------------|-----------|
| 1. | A. mist | B. mind | C. mart | D. mint |
| 2. | A. on | B. up | C. as | D. to |
| 3. | A. cool | B. took | C. tool | D. wool |
| 4. | A. rat | B. sip | C. arm | D. log |
| 5. | A. trap | B. trim | C. trot | D. tree |
| 6. | A. beak | B. week | C. meet | D. feed |
| 7. | A. classify | B. paste | C. trespass | D. essay |
| 8. | A. ghost | B. twig | C. high | D. tough |
| 9. | A. lapel | B. level | C. label | D. loyal |
| 10. | A. veil | B. neighbor | C. field | D. weigh |
| 11. | A. flood | B. fellow | C. flaw | D. few |
| 12. | A. quit | B. quite | C. quill | D. quick |
| 13. | A. leash | B. bashful | C. short | D. ashore |
| 14. | A. riddle | B. roller | C. fall | D. tossed |
| 15. | A. shackle | B. cracker | C. slack | D. brick |
| 16. | A. floor | B. first | C. farther | D. fair |
| 17. | A. chrome | B. couple | C. cackle | D. cycle |

WORD EXCLUSION

Which word does not belong?

- | | | | | |
|-----|-----------|-----------|------------|------------|
| 18. | A. hair | B. wait | C. laid | D. bias |
| 19. | A. stack | B. tnose | C. thistle | D. astride |
| 20. | A. tender | B. candle | C. land | D. meander |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

WORD GROUP NAMING

DIRECTIONS

In each question there are 4 words on the left which are alike in some way. In the blank space in your booklet you are to print (or write clearly) the best general name for the group of words. Be as specific as possible.

Here is an example:

I. poodle
 terrier
 hound
 collie

are all _____

Poodle, terrier, hound and collie are all animals, but the best (most specific) name for the group is dogs. You should have written "dogs" on the line.

There are 20 questions. Be sure to answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

WORD GROUP NAMING

- | | | | |
|----|---|---------|-------|
| 1. | ant
bee
fly
beetle | are all | _____ |
| 2. | goblet
mug
teacup
glass | are all | _____ |
| 3. | football
bat
tennis racket
golf club | are all | _____ |
| 4. | pin
staple
tack
zipper | are all | _____ |
| 5. | leaf
twig
trunk
root | are all | _____ |
| 6. | barrel
bathtub
purse
watering can | are all | _____ |
| 7. | baby
chick
colt
puppy | are all | _____ |
| 8. | fairy
genie
elf
mermaid | are all | _____ |

GO ON TO THE NEXT PAGE

WORD GROUP NAMING

- | | | | |
|-----|---|---------|-------|
| 9. | blimp
spaceship
plane
balloon | are all | _____ |
| 10. | lawn mower
hoe
rake
spade | are all | _____ |
| 11. | tepee
nest
beehive
igloo | are all | _____ |
| 12. | scissors
knife
razor blade
saw | are all | _____ |
| 13. | thermometer
ruler
scales
speedometer | are all | _____ |
| 14. | mouth
nose
ear
eye | are all | _____ |
| 15. | ice
steam
raindrop
snowflakes | are all | _____ |
| 16. | newspaper
TV
radio
telephone | are all | _____ |

WORD GROUP NAMING

- | | | | |
|-----|--------------------------------------|---------|-------|
| 17. | cow
pig
chicken
horse | are all | _____ |
| 18. | cane
kiss
bar
lollipop | are all | _____ |
| 19. | turkey
penguin
duck
ostrich | are all | _____ |
| 20. | hoof
paw
foot
flipper | are all | _____ |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

WORD GROUPS

DIRECTIONS

There are four (4) words on the left for each question. They are alike in some way in their structure or form. The meaning of the words has nothing to do with the way they are alike. There are three possible answers on the right. You are to decide which one of the three (3) possible answers has the same form as the words on the left. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. Fill in the answer box on the answer sheet that has the same letter as the answer you picked. Remember to pay attention to only the structure or form of the words.

Here is an example:

I. ran	A. fat
man	B. fan
can	C. cat
tan	

I. ☐ A ☒ B ☐ C

How are the four words on the left alike?

They all end in an. Which word - fat, fan, or cat - is like the four words on the left?

A. fat and C. cat do not end in an.
 B. fan does end in an.

The answer is B. fan. Its letter is B. The B-box is marked correctly above.

There are 20 questions. Answer all of them. There are many different ways the groups of words can be alike.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

WORD GROUPS

Which word on the right belongs with the group on the left?

- | | | |
|-----|--------------------------------------|----------------------------------|
| 1. | on
it
as
up | A. to
B. am
C. no |
| 2. | fool
cool
tool
wool | A. took
B. coon
C. pool |
| 3. | rat
sip
bed
log | A. hum
B. arm
C. eye |
| 4. | mist
mast
mart
mint | A. malt
B. dart
C. mind |
| 5. | trap
trim
trot
tree | A. teen
B. tear
C. true |
| 6. | classify
boss
trespass
kiss | A. paste
B. essay
C. busy |
| 7. | ghost
high
aghast
tough | A. ghetto
B. twig
C. hang |
| 8. | vein
weigh
freight
neighbor | A. field
B. sieve
C. veil |
| 9. | flaw
fellow
few
fellow | A. flood
B. flow
C. felled |
| 10. | quart
quill
quote
quick | A. quite
B. quit
C. trick |

GO ON TO THE NEXT PAGE

WORD GROUPS

Which word on the right belongs with the group on the left?

- | | | |
|-----|--|-------------------------------------|
| 11. | seven
never
bevel
fever | A. level
B. devil
C. beaver |
| 12. | riddle
tossed
swelling
roller | A. role
B. free
C. burrow |
| 13. | furlough
trough
bough
enough | A. huge
B. dough
C. eight |
| 14. | shackle
track
cracker
back | A. trace
B. brick
C. slack |
| 15. | floor
fair
for
farther | A. fear
B. feed
C. first |
| 16. | bat
rot
sit
get | A. bin
B. cut
C. sod |
| 17. | cycle
cackle
chuckle
cradle | A. create
B. chrome
C. couple |
| 18. | flood
door
look
stool | A. doom
B. lot
C. rode |
| 19. | steer
first
thistle
astride | A. those
B. sift
C. stack |
| 20. | hair
wait
laid
bail | A. bias
B. main
C. dial |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY. DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

WORD LINKAGE

DIRECTIONS

For each question there are two (2) words on the left and three (3) possible answers on the right. You are to pick the answer that is related in meaning to both of the words on the left. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. You are to fill in the answer box on the answer sheet that has the same letter as the answer you picked.

Here is an example:

I. airplane--insect

- A. fly
- B. passenger
- C. bug

I. ☒ A ☐ B ☐ C

Airplane and insect are not related to each other. However, insect is related to bug and to fly, and airplane is related to fly and to passenger.

Fly is the only answer that is related to both words airplane and insect. The letter for fly is A. The A-box is marked correctly above.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

WORD LINKAGE

Which of the three words on the right is related in meaning to both words on the left?

- | | | |
|-----|--------------------|--------------------------------------|
| 1. | wander - snow | A. cold
B. walk
C. drift |
| 2. | foot - hit | A. shoe
B. slap
C. sock |
| 3. | quiet - yet | A. still
B. silent
C. not |
| 4. | palm - appointment | A. date
B. time
C. hand |
| 5. | fungus - shape | A. form
B. mold
C. decay |
| 6. | fence - write | A. cage
B. pen
C. paper |
| 7. | horse - delay | A. stall
B. relay
C. race |
| 8. | pucker - handbag | A. pocketbook
B. purse
C. kiss |
| 9. | season - coil | A. spring
B. wire
C. fall |
| 10. | bend - thin | A. skinny
B. lean
C. curve |

WORD LINKAGE

Which of the three words on the right is related in meaning to both words on the left?

- | | | |
|-----|---------------------|---|
| 11. | finger - hammer | A. toe
B. pliers
C. nail |
| 12. | pole - mail | A. post
B. letter
C. telephone |
| 13. | weaken - juice | A. sap
B. fluid
C. tire |
| 14. | bull - car | A. horn
B. transportation
C. animal |
| 15. | copy - scant | A. little
B. trace
C. imitate |
| 16. | texture - seed | A. rough
B. plant
C. grain |
| 17. | shoot - burn | A. flame
B. fire
C. gun |
| 18. | occupation - barter | A. exchange
B. job
C. trade |
| 19. | woo - palace | A. court
B. love
C. king |
| 20. | seat - drink | A. sip
B. chair
C. lap |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THIS BOOKLET.

WORD RELATIONS

DIRECTIONS

Each question has five (5) words and a blank space in 3 pairs on the left. The first two pairs of words show a pattern in the structure or form of the words. These patterns have nothing to do with the meaning of the words. You are to discover the pattern of the first two pairs of words. One word is missing from the third pair where the blank space is. You are to pick the one word from the list of possible answers on the right that fits this pattern and belongs in the blank space. On the answer sheet, find the row of answer boxes numbered the same as the question you are working on. Look at the letter that goes with your answer. Fill in the box on the answer sheet that has the same letter as your answer. Remember to pay attention only to the structure or form of the words.

There are several different patterns in the test. Here is one example:

I. top - pot	A. pet
	B. tat
tip - pit	C. part
	D. put
tap - ____	E. pat

I. 2 3 4 5 1

Look at the first two pairs of words on the left. Can you discover the pattern?

The pattern is that for the second word of each pair, the letters of the first word have been reversed; t o p goes to p o t and t i p goes to p i t.

Now look at the fifth word on the left. Which word on the right fits in the blank? Remember, it must follow the pattern. Reverse the letters of the fifth word, t a p to get p a t. Where is pat in the list on the right? Its letter is E. The E-box has been marked correctly above.

There are 20 questions. Answer all of them.

If you have any questions, ask them now.

DO NOT TURN THIS PAGE UNTIL ASKED TO DO SO

WORD RELATIONS

Which of the words on the right belongs in the blank space?

- | | | |
|----|----------------|----------|
| 1. | ram - ream | A. rear |
| | star - stear | B. cream |
| | cram - _____ | C. cramp |
| | | D. creak |
| | | E. start |
| 2. | pear - reap | A. dear |
| | deal - lead | B. real |
| | read - _____ | C. dead |
| | | D. rear |
| | | E. peat |
| 3. | twist - wise | A. twig |
| | frost - rose | B. tire |
| | twirl - _____ | C. wile |
| | | D. worm |
| | | E. wire |
| 4. | create - crate | A. fed |
| | emit - mit | B. fit |
| | feed - _____ | C. feet |
| | | D. feel |
| | | E. deaf |
| 5. | seat - heat | A. heap |
| | seal - heal | B. hear |
| | sear - _____ | C. seal |
| | | D. seam |
| | | E. heed |

GO ON TO THE NEXT PAGE

WORD RELATIONS

Which of the words on the right belongs in the blank space?

- | | | |
|-----|----------------|----------|
| 6. | battle - bale | A. bile |
| | middle - mile | B. male |
| | fizzle - _____ | C. fail |
| | | D. file |
| | | E. fine |
| 7. | maid - dial | A. bail |
| | feud - duel | B. base |
| | bias - _____ | C. said |
| | | D. sale |
| | | E. sail |
| 8. | knot - not | A. mark |
| | like - lie | B. stack |
| | stark - _____ | C. star |
| | | D. ark |
| | | E. stay |
| 9. | dirt - ride | A. rule |
| | fast - safe | B. luck |
| | lurk - _____ | C. curl |
| | | D. lure |
| | | E. rust |
| 10. | car - race | A. tame |
| | mat - tame | B. care |
| | mit - _____ | C. time |
| | | D. mite |
| | | E. mire |

GO ON TO THE NEXT PAGE

WORD RELATIONS

Which of the words on the right belongs in the blank space?

11. feet - fat
 beet - bat
 meet - _____
 A. met
 B. beat
 C. team
 D. mat
 E. mit
12. stamp - tame
 stilt - tile
 shirt - _____
 A. short
 B. dirt
 C. tire
 D. hint
 E. hire
13. retool - looter
 iever - revel
 reward - _____
 A. reveal
 B. drawing
 C. warden
 D. drawer
 E. reword
14. reel - rat
 feel - fat
 peel - _____
 A. par
 B. pat
 C. peg
 D. peer
 E. fell
15. mit - mist
 bet - beat
 hay - _____
 A. hat
 B. heat
 C. bay
 D. hazy
 E. may

GO ON TO THE NEXT PAGE

WORD RELATIONS

Which of the words on the right belong in the blank space?

- | | | |
|-----|----------------|---------|
| 16. | paddle - pale | A. dial |
| | | B. daze |
| | muddle - mule | C. deal |
| | | D. lead |
| | dazzle - _____ | E. dale |
| | | |
| 17. | meat - tame | A. fare |
| | | B. fame |
| | veil - live | C. fade |
| | | D. deal |
| | deaf - _____ | E. leaf |
| | | |
| 18. | taps - spat | A. flat |
| | | B. flap |
| | tang - gnat | C. wolf |
| | | D. worm |
| | flow - _____ | E. loft |
| | | |
| 19. | lead - bead | A. beak |
| | | B. lean |
| | lean - bean | C. leer |
| | | D. bake |
| | leak - _____ | E. keel |
| | | |
| 20. | snap - pans | A. mite |
| | | B. emit |
| | golf - flog | C. tame |
| | | D. taps |
| | time - _____ | E. edit |

STOP

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST ONLY.
DO NOT WORK ON ANY OTHER TEST IN THE BOOKLET.

REFERENCES

- Guilford, J.P. The nature of human intelligence. New York: McGraw-Hill, 1967.
- Guttman, Louis. Integration of test design and analysis. In Proceedings of the 1969 Invitational Conference on Test-Problems. Princeton: Educational Testing Service, 1970.
- Thurstone, L.L. Primary mental abilities. Psychometric Monograph No. 1. Chicago: The University of Chicago Press, 1938.
- Thurstone, L.L. and Thurstone, Thelma G. Factorial studies of intelligence. Psychometric Monograph No. 2. Chicago: The University of Chicago Press, 1941.

APPENDICES

APPENDIX A

Keys for Machine Scorable Tests

Test Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Best Word Class	A	B	D	C	A	B	A	B	C	C	B	B	A	B	A	A	D	C	D	D
Circle Reasoning	2	3	5	5	7	6	6	3	5	6	5	6	5	5	7	5	7	7	5	7
Class Name Selection	B	A	A	B	C	C	A	B	A	C	R	C	A	A	C	C	B	A	B	C
Disemvolved Words*	1	2	1	4	2	1	2	3	4	3	2	1	2	1	3	4	2	4	2	2
	4	2	1	3	4	5	2	1	1	2	4	5								
Letter Classification	2	1	3	1	2	2	3	1	2	1	3	1	2	1	3	2	3	1	3	3
Letter Grouping	2	3	1	4	2	1	2	3	1	4	3	1	2	4	3	2	2	4	2	1
Letter Triangle	1	2	3	3	1	3	3	2	1	2	1	1	2	3	3	1	1	3	3	2
Number Class Extension	A	C	C	B	A	B	A	C	C	B	A	C	B	C	A	B	A	C	B	B
Number Classification*	E	A	C	D	A	A	E	A	C	C	A	E	E	A	B	D	A	B	E	B
	C	D	B	A	A	C	E	E	B	C	D	B	A	B	A		D	B		
Number Exclusion	B	D	B	C	A	C	B	B	C	A	A	B	A	B	A	D	D	C	C	D
Number Relations	A	B	D	B	C	C	C	B	C	D	A	A	A	C	B	A	D	C	A	A
Number Series	D	C	C	D	A	C	B	A	C	E	C	B	C	C	B	D	E	E	A	A
Picture Class Memory	T	F	F	T	T	T	T	F	T	F	F	T	F	F	T	F	T	T	F	T
Picture Classification	B	A	C	B	C	A	B	C	C	A	A	A	B	B	B	A	C	A	C	B
Picture Exclusion	D	C	A	B	D	B	D	D	B	C	A	C	A	B	D	C	A	B	A	C
Picture Group Name Selection	B	A	B	B	C	C	C	C	A	C	B	A	A	C	B	C	A	B	B	A
Remembering Classes: Members	T	T	F	T	T	T	F	F	T	T	F	T	F	F	F	F	T	F	F	F
Remembering Classes: Names	F	T	T	F	T	T	F	F	T	F	T	T	F	F	F	T	T	F	T	F
Same-Opposite	T	F	T	F	F	F	T	F	F	T	T	F	T	T	F	T	F	T	T	F
Scrambled Sentences	F	T	F	F	T	T	T	F	F	T	F	T	F	F	T	F	T	T	T	F
Seeing Trends	B	B	A	B	A	C	A	A	C	A	A	A	A	B	C	C	B	C	B	A
Sensitivity to Order	C	E	C	B	D	A	D	C	A	C	D	B	D	B	B	C	A	E	B	C
Sentence Order*	C	A	B	A	B	C	C	A	B	A	A	B	C	A	B	C	C	A	B	C
	B	A	A	B	C	A	B	A	C	A	A	B	B	C	C	B	A	B	B	C
Verbal Analogies*	A	A	C	A	B	B	D	A	B	B	C	D	D	D	B	A	C	D	B	C
	D	A	C	C																
Verbal Classification	C	B	B	A	C	B	C	C	A	C	C	B	A	C	B	A	A	C	B	B
Verbal Exclusion	D	A	C	B	A	A	D	B	C	D	C	B	C	D	A	B	D	B	A	A
Word Exclusion	B	D	B	C	D	A	B	B	D	C	A	A	C	C	D	B	A	D	B	A
Word Groups	B	C	A	A	C	B	A	C	B	A	A	C	B	C	A	B	C	A	C	B
Word Linkage	C	C	A	A	B	B	A	B	A	B	C	A	A	A	B	C	B	C	A	C
Word Relations	B	A	E	A	B	D	E	C	A	C	D	E	D	B	D	E	C	C	A	B

* The second row contains the answers for items beginning with number 21.

APPENDIX B

Keys for Hand Scored Tests

Concealed Words
Gestalt Completion
Omelet Test
Picture Group Naming
Word Group Naming

-

CONCEALED WORDS

Key for Scoring

- | | |
|------------|------------|
| 1. dog | 11. start |
| 2. s'ioe | 12. smell |
| 3. four | 13. ship |
| 4. answer | 14. other |
| 5. about | 15. needs |
| 6. picture | 16. early |
| 7. money | 17. weight |
| 8. pool | 18. think |
| 9. reading | 19. mother |
| 10. people | 20. help |

GESTALT COMPLETION

Key for Scoring

- | | |
|-------------------|-----------------------------|
| 1. hand | 13. bird |
| 2. witch on broom | 14. ship |
| 3. wagon | 15. archer (man with bow) |
| 4. monkey | 16. top |
| 5. shoe | 17. person (woman) in chair |
| 6. elephant | 18. coffee pot |
| 7. chicken | 19. flag |
| 8. man and woman | 20. giraffe |
| 9. fire | |
| 10. steam shovel | |
| 11. pipe | |
| 12. ice skate | |

OMELET TEST

Key for Scoring

- | | |
|-----------|--|
| 1. rack | 11. silk |
| 2. gift | 12. risen, resin, rinse,
siren, reins |
| 3. boil | 13. rich |
| 4. king | 14. oven |
| 5. milk | 15. juice |
| 6. ugly | 16. agree, eager |
| 7. onion | 17. after |
| 8. skunk | 18. mayor |
| 9. extra | 19. mask |
| 10. class | 20. frisk |

PICTURE GROUP NAMING

Key for Scoring

<u>Acceptable responses</u>	<u>Non-acceptable responses</u>
1. yard tools garden tools	equipment gardening tools
2. homes shelters	animal homes
3. cutters cutting tools	tools sharp
4. measuring instruments measurers	instruments measures
5. parts of face parts of head	senses parts of body organs
6. birds	
7. feet	
8. make-believe characters pretend fairy tale people	historical fairies fairy tales people
9. flying things aircraft air transportation	transportation
10. organs body organs human organs	parts of body

NOTE: Only the answers given under "acceptable responses" are to be counted as correct (Or other forms of the same words; e.g., "drinking things" instead of "Things to drink from"). The "non-acceptable responses" column is to caution you against some common incorrect responses.

PICTURE GROUP NAMING

<u>Acceptable responses</u>	<u>Non-acceptable responses</u>
11. warm clothing protective clothing	warm clothes over clothes
12. transportation motor vehicles ways to ride	automobiles
13. sweets desserts	
14. means of communication news information	entertainment
15. forms of water	weather
16. containers holders	
17. parts of tree	
18. fasteners holders	
19. sports equipment	sports
20. insects	bugs animals

WORD GROUP NAMING

Key for Scoring

<u>Acceptable responses</u>	<u>Non-acceptable responses</u>
1. insects	bugs animals
2. drinking drinking utensils things to drink from	bottles silverware tableware
3. sports equipment	sports
4. fasteners	
5. parts of tree	
6. containers	
7. babies baby animals young	
8. make-believe pretend	historical
9. aircraft flying things	
10. gardening tools	
11. homes	animal homes
12. cutters cutting tools	tools sharp

NOTE: Only the answers given under "acceptable responses" are to be counted as correct (or other forms of the same words: e.g., "drinking things" instead of "things to drink from"). The "non-acceptable responses" column is to caution you against some common incorrect responses.

WORD GROUP NAMING

<u>Acceptable responses</u>	<u>Non-acceptable responses</u>
13. measuring instruments	
14. parts of face parts of head	senses parts of body
15. forms of water	weather
16. communication	entertainment
17. domestic animals farm animals	animals
18. sweets candies	
19. birds	
20. feet	

☆ GPO 1971 750 558